

**WOODLEIGH**school  
A SCHOOL of INDEPENDENT THOUGHT

2019

VCE Subject Selection Handbook

# VCE Subject Selection Handbook 2019

## Course Selection

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## Key Dates for VCE Subject Selection 2019

***Thursday 31 May 2018:***

Subject Information Evening

***June 2018:***

Online subject selection opens.

***Thursday 19 July 2018:***

VCE Interview Evening with VCE teachers and the careers advisor (for Year 10 Students and Parents – on request).

***Tuesday 31 July 2018:***

Submission of subject selections due by 9am. This includes selections entered online and a printed and signed receipt handed in at school.

# The Victorian Certificate of Education

## Course Selection

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Students in Years 11 and 12 will undertake the Victorian Certificate of Education (VCE). This is a full two-year course of study and this booklet is designed to assist students in making course selections. It includes details of the structure of the VCE studies offered at Woodleigh and information related to course selection. To help them make the best possible decisions, students will have a number of structured opportunities to gather general information about the VCE, explore career-related information, access individual careers counselling and talk to specific subject teachers.

*The five-step process described below is designed to provide maximum support for students in their course selections.*

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## The VCE Course Selection Process *(which begins in Year 10)*

### step 1 *Provision of Course Information*

During Term 2, Year 10 students will receive a general introduction to the VCE structure, guidance related to the principles of subject choice, and a booklet providing an overview of the subjects offered at Woodleigh. A central theme of the Year 10 Homestead program is career planning in which students will also be made aware of the publications and computer resources which will help them make informed decisions. There will be a Subject Expo during Homestead time on **Tuesday 22 May**. On **Thursday 31 May** Year 10 students and parents are invited to the Subject Information Evening at which the VCE structure and requirements and the Course Selection processes will be explained. **Please bring this guide with you.**

### step 2 *Consultation with Individual Students*

During Term 2, students will have individual interviews with the careers advisor who will encourage them to consult with relevant subject teachers.

### step 3 *Interviews with Individual Teachers / Careers Advisor – On request*

In Week 1 of Term 3, on **Thursday 19 July**, Year 10 parents and students will have the opportunity to speak to individual subject teachers regarding any specific concerns at a late afternoon session structured like a parent-teacher interview evening. An invitation to request an interview with a particular teacher or subject teacher representative, or careers advisor, will be issued to parents towards the end of Term 2. Those students who are clear about their subject options and their final selections need not attend these interviews. Further opportunities to consult with the careers advisor will also be available as required. Year 11 students are encouraged to make appointments with the careers advisor and relevant subject teachers to verify the appropriateness of their Year 12 choices. Further opportunities to consult with the careers advisor will also be available as required.

### step 4 *Completion and Submission of Subject Selection Forms – ONLINE*

Subject selection forms will be completed online and are due by 9am Tuesday 31 July. Students must complete their subject selection online, then print a receipt, have it signed by the appropriate parties and return it to school.

### step 5 *Confirmation of Courses*

Once all student forms have been processed, students will have courses confirmed. As indicated in this course information booklet, some subjects can only be offered given sufficient demand. If students are unable to be given their first preference for a subject, further counselling and advice will be given to ensure a viable alternative.

*Please don't hesitate to contact **Ms Gina Bolch** or **Ms Deb Agar** if you have any queries about this process or the VCE in general.*

# VCE Course Selection

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## Structure of the Certificate

*The VCE is a two-year Certificate for Years 11 and 12. It is made up of semester (ie. half-year) length units of study.*

### ***What makes up a two-year program of study?***

Most students will do 22 semester-length units over two years. Students can do extra or fewer units or take more time to complete the program. The minimum number of units which must be satisfactorily completed to be awarded your VCE is 16.

It is a VCAA requirement that each student selects at least 4 units of English and/or Literature. Of these four units, at least 3 must be satisfactorily completed in order to be awarded your VCE. Further, if you wish to gain an ATAR score, VTAC requires that you satisfactorily complete both Units 3 and 4 of English or Literature.

Notes:

- At Woodleigh School we offer both English Units 1–4 and Literature Units 1–4. The majority of Woodleigh students complete English Units 1–4 to satisfy the above VCAA requirement.
- Students are strongly advised to complete English Units 1–2 alongside Literature Units 1–2. Students thinking about Literature Units 1–2 on its own should discuss this with the Head of English prior to meeting this selection.

Students should select studies that are appropriate to their interests and aspirations for tertiary study, training and employment.

## Choice of VCE Units

Students are able to begin most studies at Unit 1, 2 or 3 but **not** at Unit 4.

Units are at two levels.

- Units 1 and 2 level is the equivalent of Year 11. Students can choose to do one or both units at this level.
- Units 3 and 4 level is the equivalent of Year 12. Students have to do **both** units as a sequence at this level.

At Woodleigh, students generally undertake 22 units on the following basis:

**YEAR 11: 12 Units (most commonly 6 x Unit 1 and 6 x Unit 2)**

**YEAR 12: 10 Units (most commonly 5 x Unit 3 and 5 x Unit 4)**

Depending on the circumstances of individual students, this structure may be altered according to the following guidelines:

- Students who are struggling academically may complete five rather than six Unit 1 and 2 studies. This gives the student the opportunity for additional study time and to seek help from Pathways staff.
- Students who are performing strongly in all subject areas and have particular strengths may be encouraged to undertake a Unit 3 and 4 sequence while still in Year 11. There is an expectation that this advancement will not be at the expense of a student's Year 11 program and that students will still undertake a total of six studies during Year 11. (See the Acceleration Policy and information on pages 8–10.)
- Year 12 students who are struggling academically may choose to focus on 4 studies rather than 5 studies in their final year.

# VCE Course Selection

## VCE Studies at Woodleigh School

### *English*

Units 1–4 and/or Literature Units 1–4

### *The Arts (Creativity/Design/Technology)*

Drama Units 1–4  
Media Units 1–4  
Music Performance Units 1–4  
Product Design and Technology Units 1–4  
Studio Arts Units 1–4  
Visual Communication Design Units 1–4

### *Business*

Accounting Units 1–4  
Business Management Units 3–4  
Economics Units 1, 3–4  
Legal Studies Units 1, 3–4

### *Humanities*

History Units 1–4  
Literature Units 1–4

### *Languages*

LOTE: French Units 1–4  
LOTE: Indonesian Units 1–4

### *Personal Development*

Food Studies Units 1–4  
Health and Human Development Units 3–4  
Outdoor and Environmental Studies Units 1–4  
Physical Education Units 1–4

### *Mathematics*

Foundation Mathematics Units 1–2  
Further Mathematics Units 3–4  
General Mathematics Units 1–2  
Mathematical Methods Units 1–4  
Specialist Mathematics Units 1–4

### *The Sciences*

Agricultural and Horticultural Studies Units 1–4  
Biology Units 1–4  
Chemistry Units 1–4  
Physics Units 1–4  
Psychology Units 1–4

### *Technology*

Computing Units 1–2  
Informatics Units 3–4

### *Other*

Extended Investigation Units 3–4

*Please note: Not all listed studies or units will be offered in every year.*

*Units will be offered on the basis of school resources and student interests and needs.*

*The school reserves the right to balance the number of units offered if there is an excessive imbalance.*

### *Faculty and Subject Contact Information*

*Specific subject information, in addition to that which is provided here, can be sought from the relevant Faculty or Department Heads.*

Careers / VETiS / SBAT	Ms Gina Bolch / Mr Laurent Julicher
English	Ms Helen Billett
Drama	Ms Carey Saunders
Humanities	Mr Tom Ryan
LOTE	Ms Michelle Pitcher
Mathematics	Ms Christina Brown
Media	Ms Jeanette Kaindel
Music	Ms Cathy Holt
Personal Development	Mr Michael Paxino
Science	Ms Lyn Stanley
Technology	Mr Lance Pilgrim
Visual Arts	Ms Kristen Guthrie

# VCE Course Selection

## Satisfactory Completion of the VCE

**To achieve satisfactory completion of the VCE, students are required to:**

- satisfactorily complete at least 16 units of study
- satisfactorily complete at least 3 units of English or Literature (at least *one* unit at 3 & 4 level)
- satisfactorily complete at least 3 sequences of Unit 3 & 4 studies (ie. 6 units) in addition to English/Literature.

## Assessment of Level of Performance in a Unit

### Unit Outcomes

Outcomes form the basis for satisfactory completion of VCE units. Each VCE unit includes a set of two to four Outcomes. All Outcomes must be achieved for satisfactory completion of the given unit.

### Assessment of VCE Units 3 and 4

All studies have both school-based assessment (either School-Assessed Coursework [SACs] or School-Assessed Tasks [SATs]) and external examinations. Marks for SACs are moderated against examination results and the GAT; SAT results may be reviewed by visitation.

SACs will involve a series of concise exercises set by the classroom teacher, taken over a short timeframe with classroom supervision. Much of the work in school-assessed coursework will include tasks normally performed as part of regular classroom instruction, such as an experiment, essay, test or assignment. SATs are products or models, also completed mainly in class time, but over longer time frames.

### Examinations: Units 3 and 4

Written examinations take place in November. All studies have at least one written examination.

Note that all students must complete the GAT (General Achievement Test) in June of *every* year they are enrolled in a Unit 3 and 4 study.

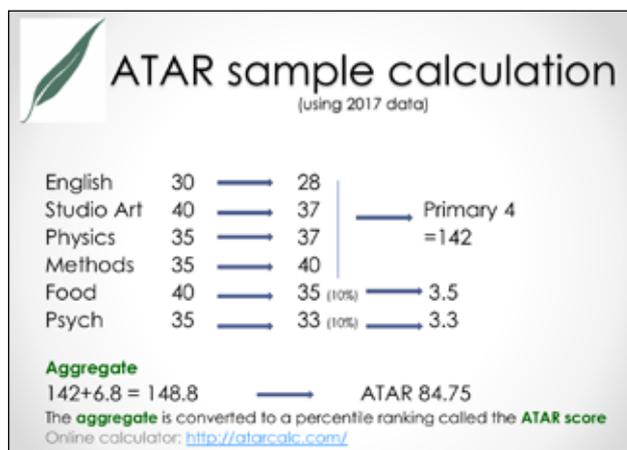
### Study Scores

Students' overall achievements for each study will be calculated and reported as a Study Score (Relative Position) on a scale of 0 to 50. The following table shows the study score breakdown:

Study score	Percentage of students on or above this study score
45	2%
40	9%
35	26%
30	53%
25	78%
20	93%

The Study Score is then 'scaled'. Add the scaled score for English, the next best three scaled scores (called the Primary 4) and 10% of each extra score (up to a maximum of 6 subjects in total) to give an aggregate. This aggregate is converted to a percentile ranking called the ATAR.

Higher Education studies also count, as do VETiS studies.



# VCE Course Selection

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## Selecting an Appropriate Course

The VCE is designed to be a two-year program and the following questions should be used to guide student choice:

- What am I most interested in?
- In which studies am I most likely to succeed?
- What Victorian Curriculum & Assessment Authority (VCAA) requirements must I meet in order to complete my VCE?
- What studies are available at Woodleigh School?
- What VETiS studies might I be interested in?
- What prerequisite and recommended studies do I need to undertake for a particular career pathway? (The easiest way to find these is to check the most up-to-date VICTER publications on the VTAC website [www.vtac.edu.au](http://www.vtac.edu.au).)
- What advice have I received from parents, teachers and careers advisor?

The scaling and selection arrangements used by the Victorian Tertiary Admissions Centre (VTAC) have been designed to support this approach to subject selection. *The only exception to this is the built-in encouragement to study a LOTE where, after the normal scaling, the scaled mean is increased by 5. This bonus should not override the above principles for study selection but may act as an incentive to retain a language when the decision is close.*

Students may select a program that has a specific orientation (for example, Business, Science, Arts), or one that has a more general focus. It is strongly recommended that students select at least two units of Mathematics where possible. All students should see the program as personally useful, both as a means to an end and as the most interesting and challenging way of completing VCE.

Any late changes to selected courses can only be made within the constraints of the timetable blocks. They should occur only at the beginning of a semester and only after consultation with the careers advisor and teachers involved.

Note: We acknowledge that when selecting a course you may not yet have completed the Year 10 elective that relates to the VCE subject(s) you choose. This is unfortunate but it is impossible to place all Year 10 electives into Semester 1! In the case where you are yet to study the subject-related Year 10 elective, you should speak with the subject teacher involved for further information and advice.

## Online Subject Selection

Please note that we are using online subject selection again this year, via the Web Preferences program.

Full details and individual student access codes and passwords will be issued when the system is open.

The basic process is:

1. Click on the subject selection button on the Woodleigh website.
2. Enter your student access code and password.
3. Select your preferences.
4. Check and submit your preferences.
5. Print the receipt and return it to school, **signed**, by Tuesday 31 July.

Note: In order to ensure parents are involved in, and approve of, the selections made, all students are required to **print a hard copy** of their online selections and return this **with the relevant signatures** prior to the final due date of Tuesday 31 July 2018.

# VCE Course Selection – Accelerated Studies

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It is possible for students to accelerate in certain VCE studies. This process requires students to nominate a study in which they wish to accelerate and then to “qualify” to do so. Considerations will be made as follows:

## Policy on Accelerating Students in VCE Studies

### *Rationale*

There are many benefits of accelerating students into VCE subjects early, but it is also important to recognise the need to balance these benefits with the “risks”.

Some benefits include:

- Having a 6th Unit 3 and 4 subject to include in your ATAR score.
- Having the stepped experience of one study (or two studies) a year early, rather than stepping straight into a full VCE program.
- Experiencing a higher degree of challenge – the pace of the work, the rigid requirements for presentation and meeting deadlines.
- Working alongside a different (and older) peer group.
- The experience of SACs and external examinations.
- The opportunity to apply for Higher Education Studies (previously called University Enhancement Studies).

Some of the drawbacks include:

- The student may focus on the accelerated study at the expense of the remainder of their Academic program.
- The possibility that the student may achieve a lower Study Score than they would have had they completed the study in the relevant Year level.

### *Eligibility to apply*

In order to minimise possible problems, we will consider each student application carefully. Students who have been part of the Challenge Program and who have been recognised by this potential **may** automatically qualify.

For other students we would require a (flexible) combination of:

- Teacher and/or Tutor recommendations.
- Report grade average of B+ and/or working at or above standard in all relevant subjects.
- Strong NAPLAN (Year 9) and/or Year 10 testing results.
- A history of a reasonable level of maturity and organisation with their Academic studies.
- The Maths Acceleration program is a special case and students involved in this program will be reviewed by the Head of Mathematics.

Notes:

1. Students who do not initially satisfy the listed criteria will be alerted to this fact. Should they still wish to proceed with their application they will be required to submit the reasons (in writing) as to why they should be exempt, and to attend an interview to discuss their application.
2. Progression from accelerated Units 1 and 2 to Units 3 and 4 subject is not automatic.
3. This Acceleration criteria does **not** apply to students wishing to accelerate into VCE VETiS studies.

We recommend that for most students, the maximum number of VCE Units that they would accelerate is 2 Units (ie 1 subject). Students wishing to accelerate in more than 2 Units would only be considered in very special circumstances.\*

It is an **expectation** that all students who accelerate in at least one study, do complete a full allotment of studies at their relevant Year level alongside this accelerated study.

\* In the special case where a student is approved to do 2 studies at an accelerated pace, it is an **expectation** that they will complete a full load of 5 studies when they are in Year 12 (this may be 4 studies at Woodleigh plus one Higher Education Study or VETiS study or Distance Ed study, thus an overall total of 5 studies).

# VCE Course Selection – Accelerated Studies

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## VCE Possible Accelerated Studies

The following is a list of VCE studies offered in 2019 and their suitability for possible study by Year 11 students:

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### **Subject**

Accounting Units 3 & 4  
Agricultural and Horticultural Studies Units 3 & 4  
Biology Units 3 & 4  
Business Management Units 3 & 4  
Chemistry Units 3 & 4  
Drama Units 3 & 4  
Economics Units 3 & 4  
English Units 3 & 4  
Extended Investigation Units 3 & 4  
Food Studies Units 3 & 4  
Health and Human Development Units 3 & 4  
History Units 3 & 4  
Informatics Units 3 & 4  
Legal Studies Units 3 & 4  
Literature Units 3 & 4  
LOTE – French Units 3 & 4  
          – Indonesian Units 3 & 4  
Mathematics – Further Units 3 & 4  
              – Mathematical Methods Units 3 & 4  
              – Specialist Mathematics 3 & 4  
Media Units 3 & 4  
Music Performance Units 3 & 4  
Outdoor and Environmental Studies 3 & 4  
Physical Education Units 3 & 4  
Physics Units 3 & 4  
Product Design and Technology Units 3 & 4  
Psychology Units 3 & 4  
Studio Arts Units 3 & 4  
Visual Communication Design 3 & 4

### **Suitability Comment**

Only if Units 1 and/or 2 completed prior  
Yes  
May be possible with discussion  
Yes  
No (unless special case)  
No  
May be possible with discussion  
No (unless special case)  
Possible for individual cases  
Yes  
Yes  
No (unless special case)  
Yes  
May be possible with discussion  
No (unless special case)  
No (unless native speaker)  
No (unless native speaker)  
Yes, as part of Math Accel program  
No (unless special case)  
No  
No  
Possible for individual cases  
Yes  
May be possible with discussion  
No (unless special case)  
No  
Yes  
No (unless special case)  
No (unless special case)

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### **Notes:**

- **Timetable blockings and class size limits will restrict the availability of the studies listed above.**
- VCE subjects are only offered to students who demonstrate academic suitability – check the eligibility criteria.
- All Year 11 students must enter 6 Year 11 subject preferences. They may then also indicate up to 2 VCE\* subject preferences that they would like to be considered for.  
\*This process **requires** the completion of a written Application Form (including obtaining necessary signatures).
- If you select an accelerated study you must also indicate a Unit 1 and 2 study that you would complete if you are not considered ready to accelerate into the Unit 3 and 4 study you have nominated.

Year 11s will be required to put in an “expression of interest” to be considered for a VCE Unit 3 and 4 subject as part of the Subject Selection process. This expression of interest will be reviewed according to the criteria listed under eligibility (above).

The Timetabler will provide summary information regarding these “expressions of interest” to the Head of Studies and Director of Careers who will review the requests and present their recommendations to the Timetable Committee for final authorisation.

# VCE Course Selection – Accelerated Studies

## *Sample Expression of Interest Application Form – Accelerated VCE Studies (Year 11 students in 2019)*

(Note: Actual form will be available online)

Student's Name: \_\_\_\_\_

HS: \_\_\_\_\_ Tutor: \_\_\_\_\_

### The VCE subject I would like to be considered for:

1<sup>st</sup> preference: \_\_\_\_\_ 2<sup>nd</sup> preference: \_\_\_\_\_

### Step 1: Check your eligibility to Accelerate – tick all that apply to you

We will consider each student application carefully. **We will be looking for a combination of the following:**

- I am working at or above standard in the relevant subject(s).
- My Report comments suggest I am working to my potential.
- My Reports note a level of maturity and organisation with my Academic studies.

#### Option 1: If you DO satisfy all the criteria listed above complete the following:

**I qualify for Acceleration and have the support of the following people:** (you will need at least 2 signatures to support your application) – staff who wish to make a comment, please turn over

- Relevant current/future subject teacher: \_\_\_\_\_
- Relevant Faculty Head: \_\_\_\_\_
- Director of Careers: \_\_\_\_\_
- Tutor: \_\_\_\_\_

#### Option 2: If you do NOT meet all the criteria listed above complete the following:

**I do not satisfy all of the eligibility criteria but wish to be considered for the following reasons:** (turn over if you need more space)

Student signature: \_\_\_\_\_

Parent signature: \_\_\_\_\_

### Step 2: Submit your form with the required signatures by the due date.

Note:

- It is Woodleigh School Policy that students complete five studies in their final year of schooling (Year 12).
- Unless there are VERY special circumstances, students should accelerate in ONE VCE subject only

*Return this form to Reception/Ms Agar*

# VCE Course Selection – Higher Education Studies

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## *What are Higher Education studies?*

The Higher Education Studies Program is offered by higher education institutions (universities) and the VCAA. Two types of study, Extension and Advanced Standing, are offered through this program.

An Extension study is a first-year Higher Education study that is:

- equivalent in content and assessment in every respect to one or more of current first-year Higher Education studies and constitutes at least 20 per cent of a full-time first-year university course
- of a level for a high-achieving student and therefore is a clear advance on an identified VCE Unit 3 and 4 study and commensurate in workload with an additional VCE study
- of a level that will normally allow the student, on successful completion, to proceed to second year study at the Higher Education institution in that discipline.

An Advanced Standing study is a first-year Higher Education study that is:

- equivalent in content and assessment in every respect to one or more of current first year Higher Education studies and constitutes at least 20 per cent of a full-time first-year course
- is comprised of curriculum not available in any current VCE studies and therefore is not linked to any current VCE Unit 3 and 4 study
- of a level that will normally allow the student, on successful completion, to proceed to second year study at the Higher Education institution in that discipline.

## *Why do a Higher Education study?*

Involvement in the Higher Education Program offers students access to a range of potential benefits, including:

- Academic challenge in a broader range of studies.
- Credit towards an undergraduate qualification at the institution where the study was satisfactorily completed.
- Contribution towards satisfactory completion for the award of the VCE as a Unit 3–4 sequence without a study score.
- Contribution to the calculation of the ATAR via an increment as a fifth or sixth study.

Note: Only one Higher Education Study may contribute towards satisfactory completion for the award of the VCE.

## *Who can do a Higher Education study?*

Higher Education studies are designed for **independent, high-achieving** VCE students.

Schools recommend students for participation in the program. The principal of the school will certify that selected students meet the guidelines provided by the Higher Education institutions, which may include specific tests.

Normally, for Extension studies, students enrolling will have demonstrated high achievement across all studies and have a VCE study score of 40 or more in the preparatory study where applicable and/or an outstanding Year 11 report record. In some instances, however, students are allowed to enrol in the prerequisite VCE study concurrently with the Higher Education study.

Advanced Standing studies do not necessarily have a prerequisite or co-requisite structure in relation to current VCE studies.

## *Higher Education Studies and completing the VCE*

A Higher Education study may contribute towards satisfactory completion for the award of the VCE as an unscored Unit 3 and 4 sequence. Students who successfully complete a Higher Education study have the title of the study, the year of enrolment and the Higher Education institution name reported on their VCE Statement of Results.

## *ATAR increment*

The study can contribute to the student's ATAR as a fifth or sixth study via an increment.

If a student undertakes two Higher Education studies, VTAC will count only one study towards the increment.

Where students withdraw from or fail to satisfactorily complete the VCE preparatory study either as a prerequisite or concurrently, which is a requirement of the Higher Education study, they will not be eligible for a Higher Education study increment in their ATAR calculation regardless of their performance in the Higher Education study.

# VCE Course Selection – VETiS Studies

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## Forward Thinking: Planning for a Later Years Pathway

It is important that when planning a VCE program, future studies are kept in mind. The Victorian Certificate of Education (VCE) *and* Vocational Education and Training in Schools (VETiS) certificates can be included in a Year 11 student's program of study. Most VETiS programs are for 2 years in duration, some can be completed in 1 year. This means that if you are interested in VETiS, you should look into it for the start of your VCE. It is possible for students to start a VETiS program in Year 12; however, a statement of attainment may only be given.

## VETiS (Vocational Education & Training in Schools)

VETiS programs are available to VCE students as part of their Woodleigh School program. They are available in a range of industry areas and, on completion, students receive a nationally recognised qualification as well as credit towards units in their VCE program's ATAR calculation.

Students combine school-based studies with a VETiS program which may involve attending a TAFE college, a Registered Training Organisation (RTO) or a workplace for training, **usually** for one day per week. VETiS programs involve competency-based learning which means students perform tasks and duties to the standard expected in employment.

**Structured Workplace Learning (SWL)** with an employer in the relevant industry area is also a **compulsory** component of all VETiS programs regardless of RTO expectations. The SWL hours of work required varies between VETiS certificates. Work placement can only be completed during Term 1, Term 2 and 3 holidays and Broadening Horizons week up until December.

Students undertaking a VETiS program as part of their VCE studies will often miss some timetabled classes due to the schedule of external training (often these programs run on Wednesdays or Fridays). It is the responsibility of the **student** to ensure that they are still able to satisfactorily demonstrate the learning outcomes for their entire VCE program, so allowing time to catch up on the work missed is essential.

Some VETiS programs include a scored assessment. This allows the VETiS program to contribute to the VCE requirements and also the student's ATAR score. Students will also be required to sit the GAT.

In order to receive the VETiS qualification, it is important to note that students must undertake the equivalent of a Unit 1–4 sequence of a VCE VETiS program. If a Certificate is not fully completed whilst at secondary school, students can also receive a Certificate of Attainment for the partial completion of a VETiS program and continue studying the Certificate as a post-schooling option.

There is an additional cost when students enrol in a VETiS course. This charge varies according to the provider / study location. It is each family's obligation to meet these costs **in addition to the school fees**. Specific costs for courses should be investigated prior to choosing a VETiS study. Woodleigh School subsidises all VETiS program costs by \$700 per year. Program charges are available on by contacting the Careers Office.

It is also the student's responsibility to make their own travel arrangements to attend the various venues to complete their VETiS certificate. A limited bus service is available on Wednesday afternoons, departing Woodleigh School at approximately 11.50am and arriving at Chisholm TAFE Frankston around 1.00pm. This is an external service that is also used by students from other schools in our region. Fees apply.

Note: Costs for the VETiS courses cannot be refunded after March 1, 2019, even if the student exits the college or changes their enrolment status.

### ***VETiS Courses with a VCE Study Score***

Some VETiS programs have a Study Score that can contribute directly towards the ATAR calculation as one of the student's **primary four scaled studies** or as the fifth or sixth study.

It is important to note that the Unit 3–4 sequences of VCE VETiS programs are **not** designed as stand-alone studies. In order to receive the VETiS qualification, students must undertake the entire Unit 1–4 structure of a VCE VETiS program (which normally takes 2 years).

The following VCE VETiS programs have a Study Score available to students undertaking the relevant Unit 3–4 sequence.

- Business
- Community Services
- Creative and Digital Media
- Dance
- Engineering Studies
- Equine Studies
- Furnishing
- Health
- Hospitality
- Information, Digital Media and Technology
- Integrated Technologies

# VCE Course Selection – VETiS Studies

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- Laboratory Skills
- Music Industry (Performance or Technical Production)
- Sport and Recreation (Outdoor Recreation or Community)

For more detailed information, visit [www.vcaa.vic.edu.au/Pages/vet/index.aspx](http://www.vcaa.vic.edu.au/Pages/vet/index.aspx)

## ***Block Credit VETiS Courses***

In addition to the VCE VETiS scored programs, students are able to complete other Certificate programs which are given “Block Credit” recognition. It is important that students visit [www.vcaa.vic.edu.au/vet/programs](http://www.vcaa.vic.edu.au/vet/programs) or see the Director of Careers to clarify how the VETiS program may contribute towards their VCE and ATAR calculation. Block Credit programs are used in the 5th and 6th 10% calculation (as outlined in the VCE Assessment section).

Please note: Block Credit programs will only contribute towards the ATAR calculation if students have less than 6 permissible studies. This is currently being reviewed by VCAA.

Some of the Block Credit programs available to students include:

- Acting (Screen) Certificate II
- Agriculture Certificate II
- Animal Studies Certificate II
- Applied Fashion Design and Technology Clothing Products
- Beauty Therapy Certificate III (SBAT)
- Children’s Services Certificate III
- Christian Ministry and Theology Certificate II
- Creative Arts Screen (Animation) Certificate
- Creative Industries (Media) Certificate II
- Design Fundamentals III
- Electrical
- Hairdressing Certificate II
- Health Services Assistant Certificate III
- Justice Certificate IV
- Make-Up Services Certificate II
- Nail Technology Certificate II
- Plumbing
- Retail Certificate
- Building Design (Partial) Certificate IV
- Tourism
- Visual Arts II
- Welding and Fabrication

This list is only a snapshot of the huge array of VETiS programs offered by outside providers. If there is a program of interest that has not been listed, students are encouraged to speak to the Director of Careers to find out more information.

Note: Any student who completes a VETiS program through Swinburne University or Chisholm TAFE will be given preferred entry into further study in higher qualifications in their specified field, regardless of their ATAR score.

Details pertaining to delivery times, locations and costs for each VETiS program can be obtained by contacting the school or by visiting the Woodleigh Careers website [www.woodleighcareers.com](http://www.woodleighcareers.com).

# VCE Course Selection – SBAT

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## School Based Apprenticeships and Traineeships (SBAT)

*(Formerly known as Australian School Based Apprenticeships and Traineeships ASBAT)*

School Based Apprenticeships and Traineeships enable students to combine a senior secondary school certificate, with part-time employment and training.

Like other apprentices and trainees, a School Based Apprentice or Trainee must have a Training Contract and is paid for his/her work by the employer. School Based Apprentices or Trainees must be over 15 years of age and enrolled in a **VCE** program. The secondary school must acknowledge and endorse a Training Plan to ensure that the training will contribute appropriately to their secondary school studies.

As an example, an SBAT student may spend three days at school, one day at TAFE and one day in the workplace. The student may also do additional part-time work in the evenings or on holiday breaks. There are numerous models for delivery which is negotiated with the employer at the time of sign-up.

Woodleigh School is committed to supporting and developing SBAT. We understand the additional care required to ensure a smooth transition and successful completion. Several Apprenticeship Centres in the region facilitate the SBAT process from the initial RTO notification, training plan and enrolment through to attendance monitoring and results reporting to the secondary school.

A number of SBAT programs are approved to provide credit in the VCE. Other apprenticeship programs not yet approved may also provide credit in the VCE under Block Credit Recognition.

School Based Apprenticeships in the following areas are approved for the VCE:

- Agriculture
- Automotive
- Business
- Community Service
- Engineering
- Food Processing
- Food Processing (Wine)
- Horticulture
- Hospitality (Operations)
- Information Technology
- Retail Operations
- Seafood Industry
- Sport and Recreation

School Based Apprenticeships and Traineeships are also available in any other industry area for which Skills Victoria have approved funding. School Based Apprenticeships and Traineeships in other approved industry areas may also contribute to the VCE through **Block Credit Recognition**.

### *Useful Contacts for further Information*

- Australian Apprenticeship on 13 38 73
- [www.australianapprenticeships.gov.au](http://www.australianapprenticeships.gov.au)
- Australian Government Department of Education and Training [www.training.gov.au](http://www.training.gov.au)
- The VCAA website [www.vcaa.vic.edu.au](http://www.vcaa.vic.edu.au) for VCE and VETiS information.

### *School Based Apprenticeship and Traineeship Process*

- Student finds employer who will take them on as part-time apprentice/trainee.
- Round table interview involving the Parents, Student, School, Employer and Apprenticeship Field Officer.
- Student and Employer sign Training Contract (facilitated through an Australian Apprenticeship Centre).
- RTO Notification form is sent to School Programs Co-coordinator.
- Teaching Department will arrange training and develop the Training Plan.
- Student registered on the Schools Database and the RTO Notification form forwarded to the Teaching Department.
- School Programs will contact the secondary school to seek approval and signature on the Training Plan.
- School Programs Co-ordinators will return the RTO Notification form with the signed Training Plan to the Apprenticeship Centre.

# Accounting



VCE Accounting focuses on the financial events and decision-making for a small business. Students will study theoretical and practical aspects of Accounting and develop skills in calculating, recording and reporting financial events to support more effective decision-making. The accounting information will be collected and applied using both manual and ICT methods.

## ***Unit 1: Role of accounting in business***

This unit explores the establishment of a business and the role of accounting in the determination of business success or failure. In this, it considers the importance of accounting information to stakeholders. Students analyse, interpret and evaluate the performance of the business using financial and non-financial information. They use these evaluations to make recommendations regarding the suitability of a business as an investment.

Area of Study 1: The role of accounting

Area of Study 2: Recording financial data and reporting accounting information for a service business

## ***Unit 2: Accounting and decision-making for a trading business***

In this unit, students develop their knowledge of the accounting process for sole proprietors operating a trading business, with a focus on inventory, accounts receivable, accounts payable and non-current assets. Students use manual processes and ICT, including spreadsheets, to prepare historical and budgeted accounting reports. They use relevant financial and other information to predict, budget and compare the potential effects of alternative strategies on the performance of the business. Using these evaluations, students develop and suggest to the owner strategies to improve business performance.

Area of Study 1: Accounting for inventory

Area of Study 2: Accounting for and managing accounts receivable and accounts payable

Area of Study 3: Accounting for and managing non-current assets

## ***Unit 3: Financial accounting for a trading business***

This unit focuses on financial accounting for a trading business owned by a sole proprietor, and highlights the role of accounting as an information system. Students use the double entry system of recording financial data and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording. Students develop their understanding of the accounting processes for recording and reporting and consider the effect of decisions made on the performance of the business. They interpret reports and information presented in a variety of formats and suggest strategies to the owner to improve the performance of the business.

Area of Study 1: Recording and analysing financial data

Area of Study 2: Preparing and interpreting accounting reports

## ***Unit 4: Recording, reporting, budgeting and decision-making***

In this unit, students further develop their understanding of accounting for a trading business owned by a sole proprietor and the role of accounting as an information system. Students use the double entry system of recording financial data, and prepare reports using the accrual basis of accounting and the perpetual method of inventory recording. Both manual methods and ICT are used to record and report. Students extend their understanding of the recording and reporting process with the inclusion of balance day adjustments and alternative depreciation methods. They investigate both the role and importance of budgeting in decision-making for a business. They analyse and interpret accounting reports and graphical representations to evaluate the performance of a business. From this evaluation, students suggest strategies to business owners to improve business performance.

Area of Study 1: Extension of recording and reporting

Area of Study 2: Budgeting and decision-making

*Studies in VCE Accounting can lead to study and career options in the following areas:*

Accountant

Business analyst

Diplomat

Financial planner/Manager

Management consultant

Portfolio manager

Stockbroker

Trade analyst

Auditor

Company secretary

Financial advisor

Human resource developer

Marketing officer

Project manager

Tax agent

University lecturer

Bank officer

Corporate treasurer

Financial journalist

Investment analyst

Market researcher

Statistician

Teacher

Valuer

# Agricultural and Horticultural Studies

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**Agricultural and Horticultural Studies is designed to develop students' understanding of the operations and practices involved with sustainable agricultural and horticultural systems within an economic, social and environmental context. This study allows students to develop and apply theoretical knowledge and skills to real world business and practices. Students apply their acquired knowledge and skills to design, develop and manage an agricultural and/or horticultural business as a project within this study.**

## ***Unit 1: Agricultural and horticultural operations***

This unit provides an overview of local agricultural and horticultural operations and the economic, social, environmental and historical factors that influence these operations. Students develop an understanding of how the biological and physical components of the environment and human resources influence the type of agribusinesses undertaken at particular locations. Students research and implement a small agricultural and/or horticultural business project.

Area of Study 1: Influences on agricultural and horticultural systems

Area of Study 2: Agricultural and horticultural operations

## ***Unit 2: Production***

This unit focuses on plant and animal nutrition, growth and reproduction and their relationships within agribusiness systems. Students consider the impacts of climate extremes on plant and animal production and use a scientific approach to investigating aspects of production. They use a small business project to explore the role of agribusiness in value-adding to the product of an agricultural and/or a horticultural business.

Area of Study 1: Biological and environmental factors

Area of Study 2: Production systems and processes

## ***Unit 3: Technology, innovation and business practices***

This unit focuses on a range of technology that is currently used by commercial agricultural and/or horticultural businesses; students review the areas where change and innovation are occurring. Management of soil/growing media, water, pests and diseases of plants and/or animals and weeds are also considered through an integrated management approach. Students individually design a small agricultural or horticultural business that involves the management of plants and/or animals. Students will continue to manage this business in Unit 4.

Area of Study 1: Current management techniques

Area of Study 2: New or emerging technology

Area of Study 3: Business design

## ***Unit 4: Sustainable management***

This unit focuses on the management of agricultural and horticultural systems within the context of economic, social and environmental sustainability. The unit takes a holistic ecological approach to issues associated with land, plant and animal management.

Area of Study 1: Sustainability in agriculture and horticulture

Area of Study 2: Resource management and maintenance

Area of Study 3: Business plan implementation and evaluation

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*Studies in Agricultural and Horticultural Studies can lead to study and career options in the following areas:*

Agricultural engineer  
Biochemist  
Dairy technician  
Farmer/Farm manager  
Horticulture manager  
Teacher  
Stock and station agent  
Veterinarian

Agricultural resource economist  
Botanist  
Ecologist  
Forester  
Landscape architect  
Tree surgeon  
Sustainability consultant  
Viticulturist

Agronomist  
Customs officer  
Environmental scientist  
Fruit, vegetable and flower grower  
Park ranger  
Soil scientist  
University lecturer  
Zoologist

# Biology

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**Biological Science is a critically important scientific discipline. It uses the key concepts of all the scientific disciplines to examine the interaction of living things with the physical world. In our modern society knowledge of biology is critical in many fields: conservation biology, immunology, pharmacology, neurosciences and medicine and its allied industries. Importantly, Melbourne and Australia host many world-class institutions employing scientists in these fields. Students will learn about core concepts of Biology and how these are applied in their study of VCE Biology.**

## ***Unit 1: How do living things stay alive?***

Cells are the basis of life. What do cells contain? How do they get the materials they need to perform their functions? How do they deal with their wastes? Organisms are comprised of cells and need to adapt themselves to gain what their cells need from the environment. However, they must compete with or collaborate with other organisms within their environment and the environment itself to ensure the organism's success.

Area of Study 1: How do organisms function?

Area of Study 2: How do living things sustain life?

Area of Study 3: Practical investigation

## ***Unit 2: How is continuity of life sustained?***

Cells are the basis of life. How do they reproduce? How does transmission of biological information from generation to generation occur? Students examine the process of DNA replication, cell division in prokaryotes and eukaryotes, sexual reproductive strategies, stem cells and medical therapies associated with human reproduction and treatment of disease.

Area of Study 1: How does reproduction maintain the continuity of life?

Area of Study 2: How is inheritance explained?

Area of Study 3: Investigation of an issue

## ***Unit 3: How do cells maintain life?***

The cell is a dynamic system of interacting molecules that define life. In this unit students investigate the workings of the cell from several perspectives. They explore the structure and function of the plasma membrane, the role of enzymes, the synthesis of proteins, the structure and function of nucleic acids and the manner in which cells communicate with each other to coordinate the various processes that maintain life.

Area of Study 1: How do cellular processes work?

Area of Study 2: How do cells communicate?

## ***Unit 4: How does life change and respond to challenges over time?***

In this unit students consider the continual change and challenges to which life on Earth has been subjected. They investigate the relatedness between species and the impact of various change events on a population's gene pool. Students examine the structural and cognitive trends in the human fossil record and the interrelationships between human biological and cultural evolution.

Area of Study 1: How are species related?

Area of Study 2: How do humans impact on biological processes?

Area of Study 3: Practical investigation

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*Studies in VCE Biology can lead to study and career options in the following areas:*

Agricultural scientist  
Biologist  
Ecologist  
Forensic pathologist  
Immunologist  
Microbiologist  
Pharmacist  
Veterinarian

Agronomist  
Biotechnologist  
Entomologist  
Geneticist  
Landscape architect  
Natural therapist  
Teacher  
Viticulturist

Anatomist  
Botanist  
Environmental planner  
Horticulturalist  
Marine biologist  
Pathologist  
University lecturer  
Zoologist

# Business Management

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VCE Business Management examines the ways businesses manage resources to achieve objectives. The VCE Business Management study design follows the process from the first idea for a business concept, to planning and establishing a business, through to the day-to-day management of a business. It also considers changes that need to be made to ensure continued success of a business. Students develop an understanding of the complexity of the challenges facing decision makers in managing these resources. A range of management theories is considered and compared with management in practice through contemporary case studies drawn from the past four years. Students learn to propose and evaluate alternative strategies to contemporary challenges in establishing and maintaining a business.

## ***Unit 3: Managing a business***

In this unit students explore the key processes and issues concerned with managing a business efficiently and effectively to achieve the business objectives. Students examine the different types of businesses and their respective objectives. They consider corporate culture, management styles, management skills and the relationship between each of these. Students investigate strategies to manage both staff and business operations to meet objectives. They develop an understanding of the complexity and challenge of managing businesses and, through the use of contemporary business case studies from the past four years, have the opportunity to compare theoretical perspectives with current practice.

Area of Study 1: Business foundations

Area of Study 2: Managing employees

Area of Study 3: Operations management

## ***Unit 4: Transforming a business***

Businesses are under constant pressure to adapt and change to meet their objectives. In this unit students consider the importance of reviewing key performance indicators to determine current performance and the strategic management necessary to position a business for the future. Students study a theoretical model to undertake change, and consider a variety of strategies to manage change in the most efficient and effective way to improve business performance. They investigate the importance of leadership in change management. Using a contemporary business case study from the past four years, students evaluate business practice against theory.

Area of Study 1: Reviewing performance – the need for change

Area of Study 2: Implementing change

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*Studies in VCE Business Management can lead to study and career options in the following areas:*

Advertising	Brand management	Business analyst
Company secretary	Diplomat	Exporter/Importer
Farmer/Farm manager	Financial journalist	Financial manager
Human resource developer	Industrial relations officer	Investment analyst
Management consultant	Market researcher	Marketing officer
Political scientist	Portfolio manager	Public relations officer
Securities dealer	Statistician	Stockbroker
Teacher	Trade analyst	University lecturer

# Chemistry

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Chemistry explores and explains the composition and behaviour of matter and the chemical processes that occur on Earth and beyond. Models and theories are used to explain known chemical reactions and processes. Chemistry underpins the production and development of energy, the maintenance of clean air and water, the production of food, medicines and new materials, and the treatment of wastes.

## ***Unit 1: How can the diversity of materials be explained?***

In this unit students investigate the properties of a range of materials from metals and salts to polymers and nanomaterials. Using their knowledge of elements and atomic structure students explore the relationships between properties, structure and bonding forces within and between particles. They examine metals, ionic crystals and a range of non-metallic substances from molecules to polymers and giant lattices and relate their structures to specific applications. Quantitative concepts in chemistry, including the mole concept, are used to determine the relative masses of elements and the composition of substances. Chemical terminology is used to represent and explain observations and data from experiments.

Area of Study 1: How can knowledge of elements explain the properties of matter?

Area of Study 2: How can the versatility of non-metals be explained?

Area of Study 3: Research investigation

## ***Unit 2: What makes water such a unique chemical?***

In this unit students explore the physical and chemical properties of water, the reactions that occur in water and various methods of water analysis. They examine the polar nature of a water molecule and the relationship between these bonding forces and the physical and chemical properties of water. Solubility, concentration, pH, precipitation, acid-base and redox, are all investigated. Students study stoichiometry, analytical techniques and instrumental procedures, and apply these to determine concentrations of different species in water samples. Chemical terminology allows students to represent and explain observations and data from experiments.

Area of Study 1: How do substances interact with water?

Area of Study 2: How are substances in water measured and analysed?

Area of Study 3: Practical investigation

## ***Unit 3: How can chemical processes be designed to optimise efficiency?***

Students compare fuels quantitatively with reference to combustion products and energy outputs, apply knowledge of the electrochemical series to design, construct and test galvanic cells, and evaluate energy resources based on energy efficiency, renewability and environmental impact. Students apply rate and equilibrium principles to predict how the rate and extent of reactions can be optimised, and explain how electrolysis is involved in the production of chemicals and in the recharging of batteries.

Area of Study 1: What are the options for energy production?

Area of Study 2: How can the yield of a chemical product be optimised?

## ***Unit 4: How are organic compounds categorised, analysed and used?***

Students compare the general structures and reactions of the major organic families of compounds, deduce structures of organic compounds using instrumental analysis data, and design reaction pathways for the synthesis of organic molecules. They distinguish between the chemical structures of key food molecules, analyse the chemical reactions involved in the metabolism of the major components of food including the role of enzymes, and calculate the energy content of food using calorimetry. Students design and undertake a practical investigation related to energy and/or food, and present methodologies, findings and conclusions in a scientific poster.

Area of Study 1: How can the diversity of carbon compounds be explained and categorised?

Area of Study 2: What is the chemistry of food?

Area of Study 3: Practical investigation

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*Studies in VCE Chemistry can lead to study and career options in the following areas:*

Anaesthetist

Environmental scientist

Geneticist

Medical practitioner

Neurologist

Pathologist

Pharmacologist

Surgeon

Biochemist

Food technologist

Geochemist

Mining & metallurgy

Nutritionist

Pediatrician

Psychiatrist

Teacher

Chemical engineer

Forensic scientist

Industrial chemist

Nanotechnologist

Obstetrician/Gynaecologist

Pharmacist

Radiologist

University lecturer

# Computing

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VCE Computing provides students with opportunities to acquire and apply knowledge and skills to use digital systems efficiently and effectively when creating digital solutions both individually and as part of a network. Students investigate legal requirements and ethical responsibilities that individuals and organisations have with respect to the security and integrity of data. Through a structured approach to problem solving, incorporating computational, design and systems thinking, students are equipped to orient themselves towards the future, with an awareness of the technical and societal implications of digital systems.

## ***Unit 1: Computing***

In Unit 1, students focus on how data, information and networked digital systems can be used to meet a range of users' current and future needs. Students collect primary data and create a digital solution that graphically presents the findings of the investigation. Students examine the technical underpinnings of wireless and mobile networks, and security controls to protect stored and transmitted data. Students create a website to present different viewpoints on a contemporary issue.

Area of Study 1: Data and graphic solutions

Area of Study 2: Networks

Area of Study 3: Collaboration and communication

## ***Unit 2: Computing***

In Unit 2, students focus on data and how the application of computational, design and systems thinking skills support the creation of solutions that automate the processing of data. Students develop their computational thinking skills when using a programming or scripting language to create solutions. Students develop a sound understanding of data and how a range of software tools can be used to extract data from large repositories and manipulate it to create visualisations. Students use database management software.

Area of Study 1: Programming

Area of Study 2: Data analysis and visualisation

Area of Study 3: Data management

## ***Unit 3: Informatics***

In Unit 3 students investigate the way organisations acquire data using interactive online solutions, such as websites and applications (apps), and consider how users interact with these solutions when conducting online transactions. They examine how relational database management systems (RDBMS) store and manipulate data typically acquired this way. Students develop an understanding of the power and risks of using complex data as a basis for decision-making. Students complete the first part of a project. They frame a hypothesis and then select, acquire and organise data from multiple data sets to confirm or refute this hypothesis. The second part of the project is completed in Unit 4.

Area of Study 1: Organisations and data management

Area of Study 2: Data analytics: drawing conclusions

## ***Unit 4: Informatics***

In this unit students focus on strategies and techniques for manipulating, managing and securing data and information to meet a range of needs. Students draw on the analysis and conclusion of their hypothesis determined in Unit 3, Outcome 2, and then design, develop and evaluate a multimodal, online solution that effectively communicates the conclusion and findings. The evaluation focuses on the effectiveness of the solution in communicating the conclusion and the reasonableness of the findings. Students use their project plan to monitor their progress and assess the effectiveness of their plan and adjustments in managing the project.

Area of Study 1: Data analytics: presenting the findings

Area of Study 2: Information management

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*Studies in VCE Computing can lead to study and career options in the following areas:*

Animator

Computer systems analyst

Database administrator

Investment analyst

IT manager

Multimedia developer

Software engineer

Teacher

Cartographer

Computer systems auditor

Graphic designer

IT administrator

IT support technician

Multimedia systems engineer

Statistician

University lecturer

Computer programmer

Computer systems engineer

Industrial engineer

IT educator

Materials engineer

Network administrator

System designer

Web designer/developer

# Drama

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This study provides students with the opportunity to practically explore the ways in which Drama is created for a range of social, political, cultural and historical contexts. It focuses on the creation of roles and the development and performance of imagined characters. Students will explore Drama through performance.

## ***Unit 1: Dramatic storytelling***

This unit focuses on creating, presenting and analysing a devised performance that includes real or imagined characters, based on personal, cultural and/or community experiences and stories. It also involves analysis of a student's own performance work and analysis of a performance by professional and other drama practitioners.

Area of Study 1: Creating a devised performance

Area of Study 2: Performing a devised performance

Area of Study 3: Analysing a devised performance

Area of Study 4: Analysing a dramatic performance

## ***Unit 2: Creating Australian drama***

This unit focuses on the use and documentation of the processes involved in constructing a devised solo or ensemble performance. Students create, present and analyse a performance based on a person, an event, an issue, a place, an art work, a text and/or an icon from a contemporary or historical Australian context.

Area of Study 1: Using Australia as inspiration

Area of Study 2: Presenting a devised performance

Area of Study 3: Analysing a devised performance

Area of Study 4: Analysing Australian drama performance

## ***Unit 3: Ensemble performance***

In this unit students will rehearse and present an ensemble performance using theatrical styles and conventions in a non-naturalistic form. The processes involved in the development and realisation of the ensemble performance are developed and evaluated. Students will view a live non-naturalistic performance and develop the skills of deconstruction and analysis.

Area of Study 1: Creating and presenting an ensemble performance

Area of Study 2: Analyse play-making techniques used to construct ensemble works

Area of Study 3: Analysing non-naturalistic performance

## ***Unit 4: Solo performance***

In this unit, students develop a devised solo performance based on real and imagined characters. A range of stimulus material from a variety of cultural sources is explored. Students further develop the non-naturalistic form. The processes involved in the development of solo work are also analysed and evaluated.

Area of Study 1: Process used to create solo performances

Area of Study 2: Creating a solo performance

Area of Study 3: Analyse the creation of solo performance

## ***Additional Information***

VCE Drama students will have the opportunity to experience professional performances out of school hours.

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*Studies in VCE Drama can lead to study and career options in the following areas:*

Actor

Audiovisual technician

Costume maker

Film and TV editor

Film, stage and TV director

Program director

Sound technician

Stunt performer

Announcer

Casting director

Dancer

Film and TV producer

Lighting operator

Scriptwriter

Stage manager

Teacher

Arts administrator

Choreographer

Director of photography

Film or theatre critic

Playwright

Set designer

Stagehand

Wardrobe supervisor

# Economics

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A study of economics will guide students to become informed global citizens, able to discern economically and socially responsible decisions and to influence others to act likewise. Economic decisions are about resource use in producing goods and services, and about the distribution of the proceeds of production. Understanding of the influence of political, ethical, environmental and social forces on economic decision-making is a key focus. Skills, as well as knowledge, play an important part in the study of economics. In particular, students develop an ability to identify, collect and process data from a range of sources. Economics is a compulsory unit of study in tertiary business courses and VCE study is highly recommended for those intending to pursue a career in commerce. Students who select Economics Unit 1 will also complete Legal Studies Unit 1; this will give them a taste of both commerce subjects and provide them with a good foundation for Year 12.

## ***Unit 1: The behaviour of consumers and businesses***

Economics is interested in the way humans behave and the decisions made to meet the needs and wants of society. Students examine basic economic models where consumers and businesses engage in mutually beneficial transactions and investigate the motivations and consequences of both consumer and business behaviour. They examine a simple microeconomic model to explain changes in prices and quantities traded.

Area of Study 1: Thinking like an economist

Area of Study 2: Decision making in markets

## ***Unit 3: Australia's economic prosperity***

Students investigate the factors that influence the level of aggregate demand and aggregate supply in the economy and use models and theories to explain how changes in these variables might influence the achievement of the Australian Government's domestic macroeconomic goals and affect living standards. Students investigate the importance of international economic relationships in terms of their influence on Australia's living standards.

Area of Study 1: An introduction to microeconomics: the market system, resource allocation and government intervention

Area of Study 2: Domestic macro economic goals

Area of Study 3: Australia and the world economy

## ***Unit 4: Managing the economy***

Students develop an understanding of how the Australian Government can alter the composition and level of government outlays and receipts to directly and indirectly influence the level of aggregate demand and the achievement of domestic macroeconomic goals. Students examine the role of the Reserve Bank of Australia (RBA) with a focus on its responsibility to alter the cost and availability of credit in the economy. Students consider how the Australian Government utilises aggregate supply policies and micro economic reform to manage the Australian economy.

Area of Study 1: Aggregate demand policies and domestic economic stability

Area of Study 2: Aggregate supply policies

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*Studies in VCE Economics can lead to study and career options in the following areas:*

Agricultural and resource economist

Economist

Farmer/Farm manager

Financial manager

Investment analyst

Marketing officer

Project manager

Sociologist

Auditor

Export/Import clerk

Financial advisor

Foreign affairs and trade officer

Management consultant

Political scientist

Public relations officer

Statistician

Economics teacher

Exporter/Importer

Financial journalist

Industrial relations officer

Market researcher

Portfolio manager

Securities dealer

Stockbroker

# English

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**English is the subject that most VCE students have in common and is often seen as providing the foundation communication skills that are important for all VCE studies and for later life. As well as focusing on speaking, listening and writing skills, the course aims to develop the skills for critical engagement with literary texts and the Australian Media.**

The VCAA requires that all students must study 4 units of English **and/or** Literature. Literature Units 1–4 may be studied as an alternative to English Units 1–4 **or** students may choose to study both English and Literature.

## ***Unit 1***

In this unit students extend their ability to read texts critically and respond to texts in both a creative and analytical style. They study the way that language is used to present an argument by both creating texts designed to persuade and also analyzing persuasive texts.

Area of Study 1: Reading and creating texts

Area of Study 2: Analysing and presenting argument

## ***Unit 2***

In this unit students create written persuasive texts and develop their understanding of how to compare media texts. They learn how comparing fictional texts can enhance and develop their understanding of the ideas and literary features and the way they are constructed to develop meaning.

Area of Study 1: Reading and comparing texts

Area of Study 2: Analysing and presenting argument

## ***Unit 3***

In this unit students produce creative responses to texts that demonstrate their understanding of themes, characters and literary features. Students read and analyse texts and produce essays of analysis. They study how language is constructed to persuade.

Area of Study 1: Reading and creating texts

Area of Study 2: Analysing and presenting argument

## ***Unit 4***

In this unit students demonstrate their understanding of the features of language by constructing an oral persuasive text. They use the capacity to compare ideas, as presented in two texts, as a way of developing a deeper understanding of concepts and literary features in texts.

Area of Study 1: Reading and comparing texts

Area of Study 2: Analysing and presenting argument

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*Studies in VCE English and Literature can lead to study and career paths in the following areas:*

Actor	Announcer	Archivist
Author	Bookseller	Copywriter
Editor	Historian	Journalist
Librarian	Literary critic	Media analyst
Playwright	Presenter	Program director (radio/television)
Publicity officer	Publisher	Reviewer
Script writer	Speech pathologist	Teacher
Teacher/Librarian	University lecturer	Writer

# Extended Investigation

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VCE Extended Investigation contains Units 3–4 only and is designed to enable students to construct a rigorous, searching research question and to conduct research. The research question can come from any discipline area but it must not duplicate any current Unit 3–4 VCE study. The student's selected research question is formally lodged with the Victorian Curriculum and Assessment Authority in Term 1. Students undertake independent research and consider research ethics, relevant selected literature, conventions of academic writing including referencing systems and acknowledging sources. The work generated by the student, particularly for assessment purposes, may not be used for any other VCE study in either the current year or in a previous or subsequent year of enrolment. The study requires students to engage with a range of texts that require the application of critical thinking skills, in particular the skills associated with questioning and evidence. Students learn about types of evidence, strong and weak argument and reasoning, the differences between fact and belief, and the kinds of questions that elicit higher order thinking. This provides the student with the framework for understanding how to undertake an individual investigation.

## *Unit 3: Designing an extended investigation*

In this unit students develop skills in question construction and design, explore the nature and purpose of research, and identify a specific research question. Students use their Extended Investigation Journal to record the progressive refinement of a selected area of interest distilled into an individual research question. The research question is formally lodged with the Victorian Curriculum and Assessment Authority during Term 1 on a date published annually. Underpinning the student's preparatory work for their investigation is the development and application of critical thinking skills. While the critical thinking component of this study is located in Area of Study 3, it is assumed and expected that students will develop these skills throughout Unit 3 in the context of their individual investigation. Students undertake initial research and document their progress in their Extended Investigation Journal.

Area of Study 1: Designing a research question

Area of Study 2: Planning and commencing the investigation

Area of Study 3: Critical thinking

## *Unit 4: Presenting an extended investigation*

This unit is comprised of two parts that together constitute the student's completion of their Extended Investigation. The results of the Extended Investigation are presented in a final written report and an oral presentation. The final written report (4000 words) is submitted to VCAA. It includes the student's evaluation of the research methods and findings, and provides their response to the research question. Students also present their investigation as an oral presentation (15–20 minutes) to a non-specialist panel convened by VCAA and defend their findings, responding to questions and challenges from the panel. The language used to explain the nature and significance of the investigation in both the written report and oral presentation must, therefore, be accessible to an educated adult audience that does not necessarily have specialist knowledge in the area of investigation that is the focus of research. While undertaking Unit 4, students are supported and monitored to maintain the dimensions and scope of their investigation and to meet the milestones established in Unit 3. The Extended Investigation Journal is used to record the progress of their investigation and the assistance they receive from supervising teachers, academic mentors and others.

Area of Study 1: Presenting the final research report

Area of Study 2: Defending research findings

## *Additional Information*

We expect that, if this subject has sufficient numbers to run, we will run it **outside** our normal blocking structure to allow for input from teachers from a variety of backgrounds.

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# Food Studies

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This study examines the reasons for our food choices. It is designed to build the capacities of students to make informed food choices. Students develop their understanding of food whilst acquiring skills that enable them to take greater ownership of their food decisions and eating patterns. Students apply principles of nutrition and food science. They investigate global and local systems of food production, distribution and governance, as well as economic, environmental and ethical dimensions of our food system.

## ***Unit 1: Food origins***

This unit focuses on food around the world and in Australia. It looks at historical and cultural perspectives. Students gain an understanding of natural resources, climatic influences and social circumstances that have led to global variety in food commodities, cuisines and cultures. Students will use ingredients and food preparation techniques that have been used throughout time from an indigenous perspective and also as a result of immigration.

Area of Study 1: Food around the world

Area of Study 2: Food in Australia

## ***Unit 2: Food makers***

In this unit students investigate commercial and small-scale domestic food systems in contemporary Australia. This encompasses primary production as well as food processing and manufacturing, retail and food service. Students gain insight into the economic significance and the capacity of the food industry to provide safe, high quality food. Students prepare food that is designed for a specific purpose. They explore potential entrepreneurial opportunities to extend their role as a food producer from a domestic to a commercial context. This is in the form of a design brief folio, which includes design, product testing, production, evaluation and marketing.

Area of Study 1: Food industries

Area of Study 2: Food in the home

## ***Unit 3: Food in daily life***

This unit explores the science of food, our physical need for it and how it nourishes and sometimes harms our bodies. It incorporates the physiology of eating and the microbiology of digestion. The functional properties of food will be explored. Dietary models will be used to develop an understanding of diverse nutrient requirements. Patterns of food consumption and influences on food choice will be discussed, incorporating behavioural principles. Practical work will focus on food science such as the chemical and physical changes that occur during food preparation and cooking.

Area of Study 1: The science of food

Area of Study 2: Food choice, health and wellbeing

## ***Unit 4: Food issues, challenges and futures***

This unit focuses on issues about the environment, ecology, ethics, farming practices, the development and application of technologies, and the challenges of food security, food safety, food wastage and the use and management of water and land. It also looks into strategies to identify misinformation, enabling students to draw evidence based conclusions to navigate contemporary food fads, trends and diets. The practical part of this unit will focus on ethical and environmental food production whilst keeping in alignment with current dietary models.

Area of Study 1: Environment and ethics

Area of Study 2: Navigating food information

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*Studies in VCE Food Studies can lead to study and career options in the following areas:*

Baker/Pastry chef

Consumer advisor

Environmental health officer

Food marketing

Food stylist

Health educator

Home economist

Nutritionist

Recipe Development

Caterer

Dairy technologist

Farming

Food photography

Food taster/Quality control officer

Health inspector

Hospital catering officer

Primary or secondary food production

Teacher/University lecturer

Chef/Cook

Dietician

Food journalist/Critic

Food scientist

Food technologist

Health promotions

Hospitality advisor

Product development/Research

Waiter/Restauranteur

# Health and Human Development

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Trillions of dollars are spent world wide on health care each year. Why? Health and Human Development explores this question through looking at attitudes, beliefs, lifestyle, behaviour and environmental factors. It looks at how to measure health status, why this is difficult and the variations between population sub groups as well as countries around the world. Students will look at the impact of both nutrition and the environment and thus the importance of these factors. Students will explore the health issues faced in developing countries, similarities and differences to industrialised countries, as well as ways to address these issues. This subject also focuses on sustainability and sustainable human development. This underpins the content of Health and Human Development.

## ***Unit 3: Australia's health in a globalised world***

This unit looks at health, wellbeing and illness as multidimensional, dynamic and subject to different interpretations and contexts. Students begin to explore health and wellbeing as a global concept and to take a broader approach to inquiry. As they consider the benefits of optimal health and wellbeing and its importance as an individual and a collective resource, their thinking extends to health as a universal right. Students look at the fundamental conditions required for health improvement, as stated by the World Health Organization (WHO). Area of Study 2 focuses on health promotion and improvements in population health over time. While the emphasis is on the Australian health system, the progression of change in public health approaches should be seen within a global context.

Area of Study 1: Understanding health and wellbeing

Area of Study 2: Promoting health and wellbeing

## ***Unit 4: Health and human development in a global context***

This unit examines health and wellbeing, and human development in a global context. Students use data to investigate health status and burden of disease in different countries, exploring factors that contribute to health inequalities between and within countries. They consider the health implications of increased globalisation and worldwide trends relating to climate change, digital technologies, world trade and the mass movement of people. Area of Study 2 looks at global action to improve health and wellbeing and human development, focusing on the United Nations' (UN's) Sustainable Development Goals (SDGs) and the work of the World Health Organization (WHO).

Area of Study 1: Health and wellbeing in a global context

Area of Study 2: Health and the Sustainable Development Goals

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*Studies in VCE Health and Human Development can lead to study and career options in the following areas:*

Age carer	Ambulance officer/Paramedic	Child care worker
Child/Youth residential carer	Chiropractor	Dental assistant
Dietitian	Enrolled nurse	General medical practitioner
Health promotion officer	Medical imaging professional	Medical receptionist
Naturopath/Acupuncturist	Nursing aide	Nutritionist
Occupational therapist	Personal care assistant	Physiotherapist
Podiatrist	Receptionist	Registered nurse
Specialised medical practitioner	Speech pathologist	Youth worker

# History

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This study is designed to enable students to develop:

- an understanding of change and continuity over time
- a knowledge of how people in different times and cultures have interacted, organised their societies and given meaning to their world
- the knowledge and skills to analyse the ways in which the past has been represented both visually and in written form
- an awareness of the social, political and cultural implications of these representations
- an understanding of and ability to use the historical concepts of causation and evidence
- an understanding of concepts related to the field of history; for example, power, race, gender, class, ideology
- skills in responding to historical evidence creatively and critically in order to make meaning of the past.

## ***Unit 1: Twentieth century history 1918–1939***

In this unit students explore the nature of political, social and cultural change in the period between the world wars. The events, ideologies and movements of the period after World War One, the impact of the treaties that ended the Great War and the rise of Hitler's National Socialist (Nazi) Party in Germany are a focus. The second area of study focuses on the social life and cultural expression in the 1920s and 1930s and their relation to the technological, political and economic changes of the period.

Area of Study 1: Ideology and conflict

Area of Study 2: Social and cultural change

## ***Unit 2: Twentieth century history 1945–2000***

In this unit students explore the Cold War. Students focus on the causes and consequences of the Cold War; the competing ideologies that underpinned events, the effects on people, groups and nations and the reasons for the end of this period of ideological conflict. In the second area of study students focus on the ways in which traditional ideas, values and political systems were challenged and changed. Students explore the causes of significant political and social events and movements and their consequences. The struggle against Apartheid in South Africa and the Cuban Missile Crisis are a particular focus.

Area of Study 1: Competing ideologies

Area of Study 2: Challenge and change

## ***Units 3 and 4: Revolutions***

In Units 3 and 4 Revolutions students investigate the significant historical causes and consequences of political revolution in Russia and China. Revolutions represent great ruptures in time and are a major turning point resulting in pervasive change to society. Students analyse the long-term causes and short-term triggers of revolution. How revolutionary outbreaks are caused by the interplay of significant events, ideas, individuals and popular movements is assessed, as is the influence of social, political, economic and cultural conditions. Students also analyse the consequences of the revolution and evaluate the extent to which it brought change. The success of the revolution was not inevitable; therefore, students investigate the significant challenges that confronted the new regime. The responses to these challenges and the extent to which the consequences of revolution resulted in dramatic and wide reaching social, political, economic and cultural change, progress or decline is examined.

Area of Study 1: Causes of revolution

Area of Study 2: Consequences of revolution

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*Studies in VCE History can lead to study and career options in the following areas:*

Anthropologist  
Art historian  
Criminologist  
Historian  
Librarian  
Playwright  
Records manager  
Solicitor

Archaeologist  
Author  
Cultural heritage officer  
Journalist  
Museum curator  
Political scientist  
Researcher  
Teacher

Archivist  
Conservator  
Diplomat  
Lawyer  
Photographer  
Publisher  
Script writer  
University lecturer

# Legal Studies

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VCE Legal Studies is about the way the law relates to and serves both individuals and the community. It focuses on developing an understanding of the way in which law is generated, structured and operates in Australia. The study aims to assist the development of skills, including the ability to research and evaluate evidence and arguments, and form reasoned conclusions; identify legal problems and the means by which they may be resolved; and develop an appreciation of the individual and collective responsibility of citizens in a democratic society. Students who select Legal Studies Unit 1 will also complete Economics Unit 1; this will give them a taste of both commerce subjects and provide them with a good foundation for Year 12.

## ***Unit 1: Guilt and Liability***

In Unit 1, students study how criminal law and civil law aims to achieve social cohesion and protect the rights of individuals. Students will develop an understanding of legal foundations, such as the different types and sources of law and the existence of a court hierarchy in Victoria. Students investigate key concepts of criminal law and civil law and apply these to actual and hypothetical scenarios to determine whether an accused may be found guilty of a crime, or liable in a civil dispute. In doing so, students develop an appreciation of the way in which legal principles and information are used in making reasoned judgments and conclusions about the culpability of an accused, and the liability of a party in a civil dispute.

Area of Study 1: The people and the Australian Constitution

Area of Study 2: The presumption of innocence

Area of Study 3: Civil liability

## ***Unit 3: Rights and Justice***

In Unit 3, students study the Victorian justice system, which includes the criminal and civil justice systems, aims to protect the rights of individuals and uphold the principles of justice: fairness, equality and access. Students examine the methods and institutions in the justice system and consider their appropriateness in determining criminal cases and resolving civil disputes. Students consider the Magistrates' Court, County Court and Supreme Court within the Victorian court hierarchy, as well as other Victorian legal institutions and bodies available to assist with cases. Students explore matters such as the rights available to an accused and to victims in the criminal justice system, the roles of the judge, jury, legal practitioners and the parties, and the ability of sanctions and remedies to achieve their purposes. Students investigate the extent to which the principles of justice are upheld in the justice system and discuss recent and recommended reforms to enhance the ability of the justice system to achieve the principles of justice.

Area of Study 1: The Victorian criminal justice system

Area of Study 2: The Victorian civil justice system

## ***Unit 4: The People and the Law***

In Unit 4, students study Australia's laws and legal system and develop an understanding of the institutions that make and reform our laws, and the relationship between the Australian people, the Australian Constitution and law-making bodies. Students explore how the Australian Constitution establishes the law-making powers of the Commonwealth and state parliaments, and protects the Australian people through structures that act as a check on parliament in law-making. Students develop an understanding of the significance of the High Court in protecting and interpreting the Australian Constitution. They investigate parliament and the courts, and the relationship between the two in law-making, and consider the roles of the individual, the media and law reform bodies in influencing law reform.

Area of Study 1: The people and the Australian courts

Area of Study 2: The people, the parliament and the courts

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*Studies in VCE Legal Studies can lead to study and career options in the following areas:*

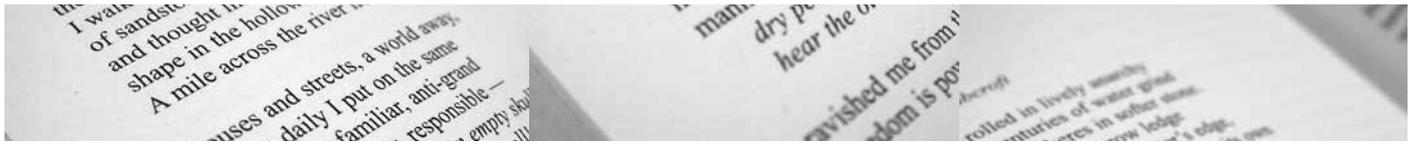
Administrative assistant  
Clerk of courts  
Diplomat  
Legal clerk  
Management consultant  
Police officer  
Senior manager  
Teacher

Barrister  
Commentator  
Human rights lawyer  
Legal secretary  
Mediator  
Politician  
Social worker  
University lecturer

Clerical officer  
Criminologist  
Journalist  
Magistrate  
Paralegal officer  
Prison warden  
Solicitor  
Youth worker

# Literature

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Students usually study Literature because they love to read. The study of Literature requires students to explore and develop understandings about what texts are and how they work.

Units 3 and 4 are designed to be taken as a sequence. It is strongly advised, but not compulsory, to have studied Units 1 or 2 Literature in preparation for Units 3 and 4.

Literature Units 1–4 may be selected in place of English Units 1–4 or in addition to English Units 1–4. Both subjects can be counted in the Primary Four in ATAR score calculation.

## ***Unit 1: Approaches to literature***

In this unit students focus on the ways in which the interaction between text and reader creates meaning. Students' analyses of the features and conventions of texts help them develop increasingly discriminating responses to a range of literary forms and styles. Students respond critically, creatively and reflectively to the ideas and concerns of texts and gain insights into how texts function as representations of human experience. They develop familiarity with key terms, concepts and practices that equip them for further studies in literature. They develop an awareness of how the views and values that readers hold may influence the reading of a text.

Area of Study 1: Reading practices

Area of Study 2: Ideas and concerns in texts

## ***Unit 2: Context and connections***

In this unit students explore the ways literary texts connect with each other and with the world. They deepen their examination of the ways their own culture and the cultures represented in texts can influence their interpretations and shape different meanings. Drawing on a range of literary texts, students consider the relationships between authors, audiences and contexts. Ideas, language and structures of different texts from past and present eras and/or cultures are compared and contrasted. Students analyse the similarities and differences across texts and establish connections between them. They engage in close reading of texts and create analytical responses that are evidence-based. By experimenting with textual structures and language features, students understand how imaginative texts are informed by close analysis.

Area of Study 1: The text, the reader and their contexts

Area of Study 2: Exploring connections between texts

## ***Unit 3: Form and transformation***

This unit focuses on the relationship between the ways different literary works are constructed and the nature of interpretations and critical responses to them. It involves the exploration of the use of language in texts to construct meaning, the main schools of critical theory and the processes through which readers construct valid meanings from texts.

Area of Study 1: Adaptations and transformations

Area of Study 2: Creative responses to texts

## ***Unit 4: Interpreting texts***

In Unit 4 Literature, the skills developed in Unit 3 are honed with an increasing emphasis on the writing skills that will be needed in the final exam: a close passage analysis of a text and an analysis of a text using a critical literary perspective.

Area of Study 1: Literary perspectives

Area of Study 2: Close analysis

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*Studies in VCE English and Literature can lead to study and career paths in the following areas:*

Actor	Announcer	Archivist
Author	Bookseller	Copywriter
Editor	Historian	Journalist
Librarian	Literary critic	Media analyst
Playwright	Presenter	Program director (radio/television)
Publicity officer	Publisher	Reviewer
Script writer	Speech pathologist	Teacher
Teacher/Librarian	University lecturer	Writer

# LOTE: French

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The study of a language other than English contributes to the overall education of students, especially in the area of communication, but also in the areas of cross-cultural understanding, cognitive development, literacy, and general knowledge. French and Indonesian are amongst the languages identified by the Australian government as being significant for Australian students.

All VCE LOTE studies aim to enable students to:

- use the language to communicate with others
- understand and appreciate the cultural contexts in which the language is used
- understand their own culture(s) through the study of other cultures
- understand the nature of language as a system
- make connections between other languages and English
- apply the language to work, further training or leisure.

## *Areas of Study*

Over Units 1- 4, there are three prescribed themes, each with three prescribed sub-topics:

**The individual** (Personal world; Education and aspirations; Personal opinions and values)

**The French-speaking communities** (Lifestyles; Historical perspectives; Arts and entertainment)

**The changing world** (Social issues; The world of work; Scientific and technological issues)

## *Unit 1*

Outcome 1: Establish and maintain a spoken or written exchange related to personal areas of experience.

Outcome 2: Listen to, read and obtain information from spoken and written texts.

Outcome 3: Produce a personal response to a text focusing on real or imaginary experience.

## *Unit 2*

Outcome 1: Participate in a spoken or written exchange related to making arrangements and completing transactions

Outcome 2: Listen to, read, and extract and use information and ideas from spoken and written texts.

Outcome 3: Give expression to real or imaginary expression in spoken or written form.

## *Unit 3*

Outcome 1: Express ideas through the production of original texts

Outcome 2: Analyse and use information from spoken texts

Outcome 3: Exchange information, opinions and experiences

## *Unit 4*

Outcome 1: Analyse and use information from written texts

Outcome 2: Respond critically to spoken and written texts which reflect aspects of the language and culture of French-speaking communities.

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*Studies in VCE LOTE: French can lead to study and career options in the following areas:*

Careers at SBS, with its wide multicultural audience  
Careers with the Department of Foreign Affairs and Trade  
Diplomat  
Jobs at the Olympic Games & other international events  
Marketing  
Translator – in court cases and related legal areas

Careers in the travel and tourism industry  
Careers within International and EU Companies  
Interpreter  
Journalist  
Teacher  
Writer

# LOTE: Indonesian

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The study of a language other than English contributes to the overall education of students, especially in the area of communication, but also in the areas of cross-cultural understanding, cognitive development, literacy, and general knowledge. French and Indonesian are amongst the languages identified by the Australian government as being significant for Australian students.

All VCE LOTE studies aim to enable students to:

- use the language to communicate with others
- understand and appreciate the cultural contexts in which the language is used
- understand their own culture(s) through the study of other cultures
- understand the nature of language as a system
- make connections between other languages and English
- apply the language to work, further training or leisure.

## *Areas of Study*

Over Units 1-4, there are three prescribed themes, each with three prescribed sub-topics:

**The individual** (Personal world; Education and aspirations; Personal opinions and values)

**The Indonesian-speaking communities** (Lifestyles; Visiting Indonesia; Customs and traditions; Arts and entertainment; Stories from the past)

**The changing world** (Social issues; The world of work; Environmental issues)

## *Unit 1*

Outcome 1: Establish and maintain a spoken or written exchange related to personal areas of experience.

Outcome 2: Listen to, read and obtain information from spoken and written texts.

Outcome 3: Produce a personal response to a text focusing on real or imaginary experience.

## *Unit 2*

Outcome 1: Participate in a spoken or written exchange related to making arrangements and completing transactions

Outcome 2: Listen to, read, and extract and use information and ideas from spoken and written texts.

Outcome 3: Give expression to real or imaginary expression in spoken or written form.

## *Unit 3*

Outcome 1: Express ideas through the production of original texts

Outcome 2: Analyse and use information from spoken texts

Outcome 3: Exchange information, opinions and experiences

## *Unit 4*

Outcome 1: Analyse and use information from written texts

Outcome 2: Respond critically to spoken and written texts which reflect aspects of the language and culture of Indonesian-speaking communities.

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*Studies in VCE LOTE: Indonesian can lead to study and career options in the following areas:*

Careers at SBS, with its wide multicultural audience  
Careers with the Department of Foreign Affairs and Trade  
Diplomat  
Jobs at the Olympic Games & other international events  
Marketing  
Translator – in court cases and related legal areas

Careers in the travel and tourism industry  
Careers within International and EU Companies  
Interpreter  
Journalist  
Teacher  
Writer

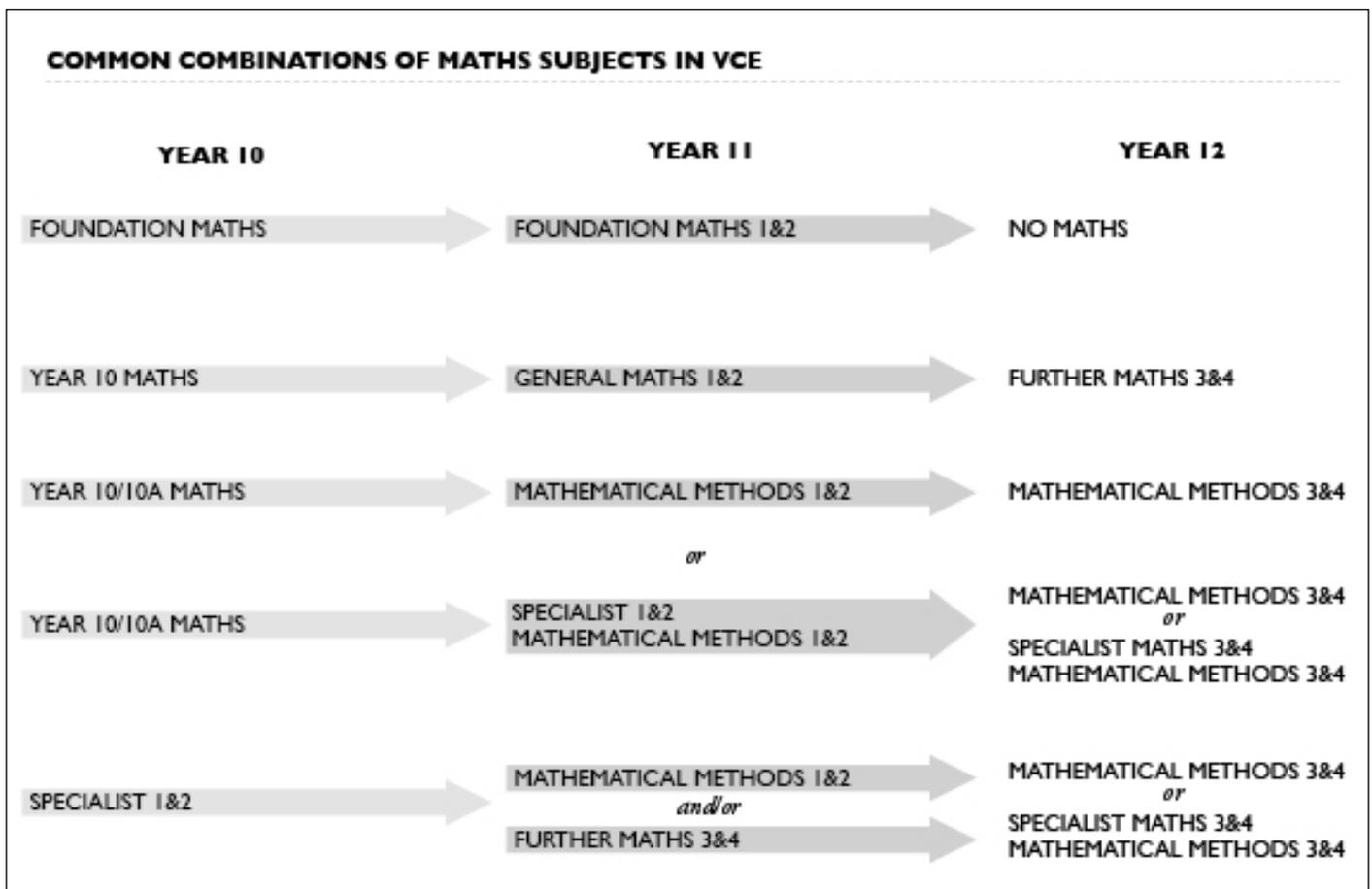
# Mathematics



The VCE Mathematics Studies are designed to provide access to worthwhile and challenging mathematical learning in a way which takes into account the needs and aspirations of a wide range of students. It is also designed to promote students' awareness of the importance of mathematics in everyday life in an increasingly technological society, and confidence in making effective use of mathematical ideas and processes. The appropriate use of technology will be incorporated into all of the VCE Mathematics Units.

*The study is made up of the following units:*

- Foundation Mathematics Units 1 and 2
- Further Mathematics Units 3 and 4
- General Mathematics Units 1 and 2
- Mathematical Methods Units 1 to 4
- Specialist Mathematics Units 1 to 4



Any 2 units of Mathematics (General or Methods) are essential for entry into all higher education courses in teaching. Some courses in midwifery, nursing, business, hospitality, tourism, early childhood, human movement and physical education also require Year 11 Mathematics. Check course pre-requisites carefully.

# Foundation Mathematics

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Foundation Mathematics provides for the continuing mathematical development of students entering VCE who need mathematical skills to support their other VCE subjects, including VETiS studies, and who do NOT intend to undertake Unit 3 and 4 studies in VCE Mathematics in the following year. It is specifically designed for those students who are not provided for in General Mathematics and Mathematical Methods, and does NOT provide a basis for undertaking Units 3 and 4 in Mathematics.

## *Unit 1*

In Foundation Mathematics there is a strong emphasis on using mathematics in practical contexts relating to everyday life, recreation, work and study. Students are encouraged to use appropriate technology in all areas of their study. These units will be especially useful for students undertaking VETiS studies.

- Area of Study 1: Space, shape and design
- Area of Study 2: Patterns and number
- Area of Study 3: Data
- Area of Study 4: Measurement

## *Unit 2*

There is a continued emphasis on using mathematics in practical contexts relating to everyday life, recreation, work and study. Students are encouraged to use appropriate technology in all areas of their study.

- Area of Study 1: Space, shape and design
- Area of Study 2: Patterns and number
- Area of Study 3: Handling data
- Area of Study 4: Measurement

## *Additional Information*

Students need to consult with their Mathematics teacher and/or the Head of Mathematics regarding their most appropriate Mathematics course choice.

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# Further Mathematics

Further Mathematics follows on from a number of the areas of study covered in General Mathematics Units 1 & 2. It has a focus on applications of mathematics to the real world and the use of technology in those applications such as spreadsheets, statistical packages and CAS calculators.

## *Units 3 & 4*

The Further Mathematics course consists of 2 compulsory core areas of study, 'Data analysis', and 'Recursion and financial modeling', and a selection of 2 from 4 modules in the 'Applications' area of study. Students will need to develop sound skills in the use of appropriate technology in both the core and applications areas of study.

- Area of Study 1: Core: Data analysis
- Area of Study 2: Core: Recursion and financial modeling
- Area of Study 3: Applications - students must complete two of the following four modules:
  - Matrices
  - Networks and decision maths
  - Geometry and measurement
  - Graphs and relations

## *Additional Information*

Students need to consult with their Mathematics teacher and/or the Head of Mathematics regarding their most appropriate Mathematics course choice.

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# General Mathematics

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This General Mathematics course caters for a diverse range of students. It is a suitable subject for those students wishing only to complete Mathematics to Year 11 and it is the recommended Mathematics subject in Year 11 for students intending to complete Further Mathematics in Year 12.

## *Unit 1*

Unit 1 provides an introduction to VCE Mathematics and the skills required. There is a strong emphasis on the use of technology. Topics covered may include: Linear relations and equations, linear graphs and co-ordinate geometry, univariate and bivariate data and applications of arithmetic. Unit 1 will cover at least 4 topics selected from at least 3 different areas of study.

- Area of Study 1: Algebra and structure
- Area of Study 2: Arithmetic and number
- Area of Study 3: Discrete mathematics
- Area of Study 4: Geometry, measurement and trigonometry
- Area of Study 5: Graphs of linear and non-linear relations
- Area of Study 6: Statistics

## *Unit 2*

Unit 2 continues to develop the technology skills introduced in Unit 1, as well as developing skills in solving application problems. Topics covered may include: Trigonometric ratios and their applications, measurement and geometry in 2D and 3D, sequences and series, variation and linear programming. Unit 2 will cover at least 4 topics selected from at least 3 different areas of study.

- Area of Study 1: Algebra and structure
- Area of Study 2: Arithmetic and number
- Area of Study 3: Discrete mathematics
- Area of Study 4: Geometry, measurement and trigonometry
- Area of Study 5: Graphs of linear and non-linear relations
- Area of Study 6: Statistics

## *Additional Information*

Students need to consult with their Mathematics teacher and/or the Head of Mathematics regarding their most appropriate Mathematics course choice.

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# Mathematical Methods

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**Mathematical Methods** is designed for students who wish to continue their studies in mathematics beyond school as well as being a prerequisite for a number of courses. It focuses on Algebra, Graphing and Probability as well as the use of technology, particularly CAS calculators, to investigate applications of the skills covered. Each of the units contains material that leads to a progressive development of skills across the four units. **Mathematical Methods Units 3 & 4** contains assumed material for the study of **Specialist Mathematics Units 3 & 4**. Students will need to purchase a CAS calculator which may also be used in **Further and Specialist Mathematics**.

## ***Unit 1***

This unit is designed as an introduction to the Mathematical Methods course. It introduces students to sketch graphs of straight lines, parabolas, cubics and circles, factorising, solving equations, gradients of lines and curves, distance–time graphs and an introduction to probability. The algebra covered relates to the sketch graphs that are covered, including solving of simultaneous equations.

Area of Study 1: Functions and graphs

Area of Study 2: Algebra

Area of Study 3: Calculus

Area of Study 4: Probability and statistics

## ***Unit 2***

This unit is designed to build on the skills and concepts covered in the Unit 1 Mathematical Methods course. It introduces students to sketch graphs of trigonometric and exponential functions, factorising, solving equations, gradients of curves – differentiation and applications, arrangements and selections.

Area of Study 1: Functions and graphs

Area of Study 2: Algebra

Area of Study 3: Calculus

Area of Study 4: Probability and statistics

## ***Units 3 & 4***

These units further extend the skills covered in Units 1 & 2, including skills covered in the use of technology. A number of new functions are introduced and their algebra and features of their graphs are described. Applications of calculus are explored such as: areas under curves, maximum and minimum problems and equations of tangents. The content of Units 3 & 4 is assumed material for **Specialist Mathematics**.

Area of Study 1: Functions and graphs

Area of Study 2: Algebra

Area of Study 3: Calculus

Area of Study 4: Probability and statistics

## ***Additional Information***

Students need to consult with their Mathematics teacher and/or the Head of Mathematics regarding their most appropriate Mathematics course choice.

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*Studies in VCE Mathematics can lead to study and career options in the following areas:*

Actuary

Auditor

Economist

Information technology manager

Mathematics teacher

Physicist

Stockbroker

Town planner

Aerospace engineer

Civil engineer

Doctor

Investment analyst

Mechanical engineer

Pilot

Surveyor

University lecturer

Architect

Computer systems engineer

Industrial designer

Mathematician

Pharmacist

Statistician

Systems analyst

Valuer

# Specialist Mathematics

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Specialist Mathematics Units 1 and 2 provide a course of study for students who wish to undertake an in-depth study of mathematics, with an emphasis on concepts, skills and processes related to mathematical structure, modelling, problem solving and reasoning. This study has a focus on interest in the discipline of mathematics in its own right and investigation of a broad range of applications, as well as development of a sound background for further studies in mathematics and mathematics related fields.

Mathematical Methods Units 1 and 2 and Specialist Mathematics Units 1 and 2, taken in conjunction, provide a comprehensive preparation for Specialist Mathematics Units 3 and 4. Students intending to study Specialist Mathematics need to be concurrently studying Units 3 & 4 Mathematical Methods or have already completed Units 3 & 4 Mathematical Methods.

## Units 1 & 2

Units 1 and 2 consist of 4 prescribed topics: Number systems and recursion, Geometry in the plane and proof, Vectors and Graphs of non-linear relations. Other topics will be selected from the following areas of study:

- Area of Study 1: Algebra and structure
  - Area of Study 2: Arithmetic and number
  - Area of Study 3: Discrete mathematics
  - Area of Study 5: Graphs of linear and non-linear relations
  - Area of Study 6: Statistics
- Some topics may be selected from the General Mathematics areas of study.

## Units 3 & 4

The course builds on skills developed in Mathematical Methods. Technology is used throughout the course, particularly CAS calculators. The topics covered are drawn from the fully prescribed areas of study listed below.

- Area of Study 1: Functions and graphs
- Area of Study 2: Algebra
- Area of Study 3: Calculus
- Area of Study 4: Vectors
- Area of Study 5: Mechanics
- Area of Study 6: Probability and statistics

## Additional Information

Students need to consult with their Mathematics teacher and/or the Head of Mathematics regarding their most appropriate Mathematics course choice.

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*Studies in VCE Mathematics can lead to study and career options in the following areas:*

Accountant	Actuary	Aerospace engineer
Architect	Auditor	Civil engineer
Computer systems engineer	Economist	Electrical engineer
Doctor	Industrial designer	Information technology manager
Investment analyst	Mathematician	Mathematics teacher
Mechanical engineer	Optometrist	Pharmacist
Physicist	Pilot	Statistician
Stockbroker	Surveyor	Systems analyst

# Media

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The media is ubiquitous in today's world. Working on a personal, local, national and global level, media is deeply embedded within life and culture. It entertains, teaches, informs, and shapes audiences' perception of their lives and the worlds in which they live. Students examine how and why the media constructs and reflects reality and how audiences engage with, consume, read, create and produce media products.

## ***Unit 1: Media forms, representations and Australian stories***

In this unit students develop an understanding of audiences and the core concepts underpinning the construction of representations and meaning in different media forms. Students analyse how representations, narrative and media codes and conventions contribute to the construction of the media realities audiences engage with and read.

Area of Study 1: Media representations

Area of Study 2: Media forms in production

Area of Study 3: Australian stories

## ***Unit 2: Narrative across media forms***

Fictional and non-fictional narratives are fundamental to the media and are found in all media forms. Students analyse the influence of developments in media technologies on individuals and society, examining in a range of media forms the effects of media convergence and hybridisation on the design, production and distribution of narratives in the media and audience engagement, consumption and reception.

Area of Study 1: Narrative, style and genre

Area of Study 2: Narratives in production

Area of Study 3: Media and change

## ***Unit 3: Media narratives and pre-production***

In this unit students explore stories that circulate in society through media narratives. They consider the use of media codes and conventions to structure meaning, and how this construction is influenced by the social, cultural, ideological and institutional contexts of production, distribution, consumption and reception. Students use the pre-production stage of the media production process to design the production of a media product for a specialized audience.

Area of Study 1: Narrative and ideology

Area of Study 2: Media production development

Area of Study 3: Media production design

## ***Unit 4: Media production and issues in the media***

In this unit students focus on the production and post-production stages of the media production process, bringing the media production design created in Unit 3 to its realisation. Students explore the relationship between the media and audiences, focusing on the opportunities and challenges afforded by current developments in the media industry.

Area of Study 1: Media production

Area of Study 2: Agency and control in and of the media

## ***Additional Information***

VCE Media students will be given the opportunity to visit industry and participate in a range of practical workshops to enhance and improve their practical and analytical skills.

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*Studies in VCE Media can lead to study and career options in the following areas:*

Actor

Camera operator

Film and TV editor

Film critic

Journalist

Multimedia developer

Set designer

Stage manager

Arts administrator

Copywriter

Film and TV lighting operator

Film, stage and television director

Make-up artist

Projectionist

Sound mixer

Web designer/developer

Audiovisual technician

Desktop publisher

Film and TV producer

Graphic designer

Motion graphics designer

Scriptwriter

Sound technician

Writer

# Music Performance

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**Music Performance develops intellectual, aesthetic and cultural understanding of the value and importance of music in solo and group settings. As soloists and members of groups, students develop skills in preparing programs of music works. They learn about and apply musicianship as they create music and interpret and analyse solo and ensemble works in a range of styles.**

## ***Unit 1***

This unit focuses on building students' performance and musicianship skills to present performances of selected group and solo music works using one or more instruments. They study the work of other performers and explore strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and endeavour to address these challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Area of Study 1: Performance

Area of Study 2: Preparing for performance

Area of Study 3: Music language

## ***Unit 2***

This unit focuses on building performance and musicianship skills. Students present performances of selected group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. They study the work of other performers and refine selected strategies to optimise their own approach to performance. They identify technical, expressive and stylistic challenges relevant to works they are preparing for performance and endeavour to address these challenges. Students develop their listening, aural, theoretical and analytical musicianship skills and apply this knowledge when preparing and presenting performances.

Area of Study 1: Performance

Area of Study 2: Preparing for performance

Area of Study 3: Music language

Area of Study 4: Organisation of sound

## ***Unit 3 & Unit 4***

These units focus on further development and refinement of performance and musicianship skills. Students focus on either group or solo performance and continue preparation of a performance program they will present in the end-of-year examination. All students present performances of both group and solo music works using one or more instruments and take opportunities to perform in familiar and unfamiliar venues and spaces. Through analyses of other performers' interpretations and feedback on their own performances, students refine their interpretations and optimise their approach to performance. They continue to address challenges relevant to works they are preparing for performance and to strengthen their listening, aural, theoretical and analytical musicianship skills.

Area of Study 1: Performance

Area of Study 2: Preparing for performance

Area of Study 3: Music language

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*Studies in VCE Music Performance can lead to study and career options in the following areas:*

Actor  
Arts administrator  
Composer  
Entertainer  
Music critic  
Music school administrator  
Musician  
Stage manager

Announcer  
Choral director  
Conductor  
Film and television composer  
Music librarian  
Music therapist  
Orchestra conductor  
Teacher

Artistic director  
Choreographer  
Disc jockey  
Journalist  
Music publisher  
Musical director  
Recreation officer  
University lecturer

# Outdoor and Environmental Studies

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VCE Outdoor and Environmental Studies is concerned with the ways humans interact with and relate to outdoor environments. Such knowledge is then enhanced through the theoretical study of outdoor environments from perspectives of environmental history, ecology and the social studies of human relationships with nature. Outdoor experiences suited to this study include guided activities in areas such as farms, mining/logging sites, coastal areas, rivers, mountains, bushland and state or national parks. Activities undertaken could include bushwalking, cross-country skiing, canoe touring, conservation and activities.

## ***Unit 1: Exploring outdoor experiences***

This unit examines some of the ways in which humans understand and relate to nature through experiences of outdoor environments. The focus is on individuals and their personal responses to and experiences of outdoor environments. Students are provided with the opportunity to explore the many ways in which nature is understood and perceived. Through outdoor experiences, students develop practical skills and knowledge to help them live sustainably in outdoor environments.

Area of Study 1: Motivations for outdoor experiences

Area of Study 2: Influences on outdoor experiences

## ***Unit 2: Discovering outdoor environments***

This unit focuses on the characteristics of outdoor environments and different ways of understanding them, as well as the human impacts on outdoor environments. In this unit students study nature's impact on humans, as well as the ecological, social and economic implications of human impact on outdoor environments. They develop the practical skills required to minimise human impact on outdoor environments. Students are provided with practical experiences as the basis for comparison between outdoor environments and reflection to develop theoretical knowledge about natural environments.

Area of Study 1: Investigating outdoor environments

Area of Study 2: Impacts on outdoor environments

## ***Unit 3: Relationships with outdoor environments***

The focus of this unit is the ecological, historical and social contexts of relationships between humans and outdoor environments in Australia. Students consider a number of factors that influence contemporary relationships with outdoor environments. They also examine the dynamic nature of relationships between humans and their environment. Students are involved in at least two experiences in outdoor environments, including in areas where there is evidence of human interaction.

Area of Study 1: Historical relationships with outdoor environments

Area of Study 2: Relationships with Australian Environments Since 1990

## ***Unit 4: Sustainable outdoor relationships***

In this unit students explore the sustainable use and management of outdoor environments. They examine the contemporary state of environments in Australia, consider the importance of healthy outdoor environments, and examine the issues in relation to the capacity of outdoor environments to support the future needs of the Australian population. They investigate current agreements and environmental legislation, as well as management strategies and policies. Students engage in one or more related experiences in outdoor environments.

Area of Study 1: Healthy outdoor environments

Area of Study 2: Sustainable outdoor environments

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*Studies in VCE Outdoor and Environmental Studies can lead to study and career options in the following areas:*

Air quality engineer

Bushwalking guide

Environmental scientist

National parks officer

OES manufacturing

OES publishing

Outdoor environment administration

Ski instructor

Atmospheric chemist

Diver

Meteorologist

OES editor

OES marketing

OES tourism

Outdoor environment management

Teacher

Biologist

Ecologist

Mountain guide

OES journalism

OES photography

Outdoor adventure officer

Rescue service officer

University lecturer

# Physical Education

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**Physical Education examines the biological, physiological, psychological, social and cultural influences on performance and participation in physical activity. Theory and practice are integrated in this study which is approached through both the study of, and participation in, physical activity.**

## ***Unit 1: The human body in motion***

In this unit students explore how the musculoskeletal and cardiorespiratory systems work together to produce movement. Through practical activities students explore the relationships between the body systems and physical activity, sport and exercise, and how the systems adapt and adjust to the demands of the activity. They consider the implications of the use of legal and illegal practices to improve the performance of the musculoskeletal and cardiorespiratory systems, evaluating perceived benefits and describing potential harms. They also recommend and implement strategies to minimise the risk of illness or injury to each system.

Area of Study 1: How does the musculoskeletal system work to produce movement?

Area of Study 2: How does the cardiorespiratory system function at rest and during physical activity?

## ***Unit 2: Physical activity, sport and society***

This unit develops students' understanding of physical activity, sport and society from a participatory perspective. Students are introduced to types of physical activity and the role participation in physical activity and sedentary behaviour plays in their own health and wellbeing as well as in other people's lives in different population groups. They collect data to determine perceived enablers of and barriers to physical activity and the ways in which opportunities for participation in physical activity can be extended in various communities, social, cultural and environmental contexts. Students study and apply the social-ecological model and/or the Youth Physical Activity Promotion Model to critique a range of individual- and settings-based strategies that are effective in promoting participation in some form of regular physical activity.

Area of Study 1: What are the relationships between physical activity, sport, health and society?

Area of Study 2: What are the contemporary issues associated with physical activity and sport?

## ***Unit 3: Movement skills and energy for physical activity***

This unit introduces students to the biomechanical and skill acquisition principles used to analyse human movement skills and energy production from a physiological perspective. Students use a variety of tools and techniques to analyse movement skills and apply biomechanical and skill acquisition principles to improve and refine movement in physical activity, sport and exercise. They use practical activities to demonstrate how correct application of these principles can lead to improved performance in physical activity and sport. Students investigate the relative contribution and interplay of the three energy systems to performance in physical activity, sport and exercise and consider different strategies used to postpone fatigue and promote recovery.

Area of Study 1: How are movement skills improved?

Area of Study 2: How does the body produce energy?

## ***Unit 4: Training to improve performance***

In this unit students analyse movement skills from a physiological, psychological and sociocultural perspective, and apply relevant training principles and methods to improve performance within physical activity at an individual, club and elite level. Improvements in performance, in particular fitness, depend on the ability of the individual and/ or coach to gain, apply and evaluate knowledge and understanding of training. Students analyse skill frequencies, movement patterns, heart rates and work to rest ratios to determine the requirements of an activity. Students consider the physiological, psychological and sociological requirements of training to design and evaluate an effective training program. Students participate in a variety of training sessions designed to improve or maintain fitness and evaluate the effectiveness of different training methods and evaluate the chronic adaptations to training from a theoretical perspective.

Area of Study 1: What are the foundations of an effective training program?

Area of Study 2: How is training implemented effectively to improve fitness?

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*Studies in VCE Physical Education can lead to study and career options in the following areas:*

Athlete

Dietician

Nutritionist

Physiologist

Sports coach

Sports journalist

Sports psychologist

Sports umpire

Athlete manager

Fitness centre manager

Personal trainer

Recreation officer

Sports commentator

Sports medicine practitioner

Sports scientist

University lecturer

Chiropractor

Fitness instructor

Physical education teacher

Sports administrator

Sports editor

Sports physiotherapist

Sports trainer

Yoga instructor

# Physics

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Physics is a natural science based on observations, experiments, measurements and mathematical analysis with the purpose of finding quantitative explanations for phenomena occurring from the subatomic scale through to the planets, stellar systems and galaxies in the Universe. While much scientific understanding in physics has stood the test of time, many other areas continue to evolve. In undertaking this study, students develop their understanding of the roles of careful and systematic experimentation and modelling in the development of theories and laws. They undertake practical activities and apply physics principles to explain and quantify both natural and constructed phenomena.

## ***Unit 1: What ideas explain the physical world?***

Students consider thermal concepts by investigating heat, probe common analogies used to explain electricity and consider the origins and formation of matter.

- Area of Study 1: How can thermal effects be explained?
- Area of Study 2: How do electric circuits work?
- Area of Study 3: What is matter and how is it formed?

## ***Unit 2: What do experiments reveal about the physical world?***

In this unit students explore the power of experiments in developing models and theories. They investigate a variety of phenomena by making their own observations and generating questions, which in turn lead to experiments.

- Area of Study 1: How can motion be described and explained?
- Area of Study 2: Is there life beyond the Earth's Solar System?
- Area of Study 3: Student designed practical investigation

## ***Unit 3: How do fields explain motion and electricity?***

In this unit students use Newton's laws to investigate motion in one and two dimensions, and are introduced to Einstein's theories to explain the motion of very fast objects.

- Area of Study 1: How do things move without contact?
- Area of Study 2: How are fields used to move electrical energy?
- Area of Study 3: How fast can things go?

## ***Unit 4: How can two contradictory models explain both light and matter?***

In this unit, students explore the use of wave and particle theories to model the properties of light and matter. They examine how the concept of the wave is used to explain the nature of light and explore its limitations in describing light behaviour.

- Area of Study 1: How can waves explain the behaviour of light?
- Area of Study 2: How are light and matter similar?
- Area of Study 3: Student designed practical investigation

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*Studies in VCE Physics can lead to study and career options in the following areas:*

Aeronautical engineer	Airline pilot	Architecture
Audiologist	Astronomer	Audio engineer
Biomedical engineer	Biophysicist	Biotechnologist
Cartographer	Civil engineer	Computer engineer
Electrical engineer	Forensic scientist	Geophysicist
Industrial designer	Mechanical engineer	Medical imaging technologist
Nuclear medicine technologist	Physicist	Radiologist
Teacher	Telecommunications engineer	University lecturer

# Product Design and Technology

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**Product Design and Technology encourages students to explore materials and production processes to design and make products for an intended purpose. The properties of materials are investigated; how these relate to the uses of the material and the implications for the construction process are considered. All products are evaluated against their intended purpose.**

## ***Unit 1: Sustainable product redevelopment***

This unit focuses on the analysis, modification and improvement of a product design with consideration of sustainability. Students consider the sustainability of an existing product, such as the impact of sourcing materials, manufacture, distribution, use and likely disposal. They consider how a redeveloped product should attempt to solve a problem related to the original product. Where possible, materials and manufacturing processes used should be carefully selected to improve the overall sustainability of the redeveloped product.

Area of Study 1: Sustainable redevelopment of a product

Area of Study 2: Producing and evaluating a redeveloped product

## ***Unit 2: Collaborative design***

In this unit students work in teams to design and develop an item in a product range or contribute to the design, planning and production of a group product. They focus on factors including end-user/s' needs and wants; function, purpose and context for product design; aesthetics; materials and sustainability; and the impact of these factors on a design solution. In this unit students gain inspiration from an historical or a contemporary design movement or style and its defining factors such as ideological or technological change, philosophy or aesthetics.

Area of Study 1: Designing within a team

Area of Study 2: Producing and evaluating within a team

## ***Unit 3: Applying the product design process***

In this unit students are engaged in the design and development of a product that addresses a personal, local, or global problem (such as humanitarian issues), or that meets the needs and wants of a potential end-user/s. The product is developed through a design process and is influenced by a range of factors including the purpose, function and context of the product; user-centred design; innovation and creativity; design elements and principles; sustainability concerns; economic limitations; legal responsibilities; material characteristics and properties; and technology. In the initial stage of the product design process a design brief is prepared, outlining the context or situation around the design problem and describing the needs and requirements in the form of constraints or considerations.

Area of Study 1: Designing for end-user/s

Area of Study 2: Product development in industry

Area of Study 3: Designing for others

## ***Unit 4: Product development and evaluation***

In this unit students engage with an end-user/s to gain feedback throughout the process of production. Students make comparisons between similar products to help evaluate the success of a product in relation to a range of product design factors. The environmental, economic and social impact of products throughout their life cycle can be analysed and evaluated with reference to the product design factors.

Area of Study 1: Product analysis and comparison

Area of Study 2: Product manufacture

Area of Study 3: Product evaluation

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*Studies in VCE Product Design and Technology can lead to study and career options in the following areas:*

Architect

Building contractor

Building technician

Carpenter and joiner

Craftsperson

Ergonomist

Interior designer

Model maker

Architectural drafter

Building inspector

Building tradesperson

Cartographer

Digital modeller

Furniture designer

Jewellery designer

Product designer

Automotive tradesperson

Building surveyor

Cabinet maker

Construction tradesperson

Electrical tradesperson

Industrial designer

Leadlight worker

Set designer

# Psychology

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Psychology is the systematic study of thoughts, feelings and behaviour. It is one of the newer sciences but one of the oldest fields of disciplined inquiry. As a science, psychology aims to describe, explain and predict behaviour; in doing so, it relies on empirical procedures rather than intuition. The application of research methods in psychology allows students to develop useful skills in analytical and critical thinking and in making inferences.

In the VCE study of Psychology, students explore complex human behaviours and thought processes. They develop empathetic understandings and an understanding of mental health issues in society.

## ***Unit 1: How are behavior and mental processes shaped?***

Students investigate the structure and functioning of the human brain. Students explore brain plasticity and the influence that brain damage may have on a person's psychological functioning. Students examine the contribution that classical and contemporary studies have made to the understanding of the human brain and its function and to the development of different psychological models and theories used to predict and explain the development of thoughts, feelings and behaviours.

Area of Study 1: How does the brain function?

Area of Study 2: What influences psychological development?

Area of Study 3: Student-directed research investigation

## ***Unit 2: How do external factors influence behavior and mental processes?***

Students study how a person's thoughts, feelings and behaviour are influenced by a variety of biological, psychological and social factors. In this unit students investigate how perception of stimuli enables a person to interact with the world around them and how their perception of stimuli can be distorted. They evaluate the role social cognition plays in a person's attitude, perception of themselves and relationships with others. Students explore a variety of functions and contexts that can influence the behaviors of an individual and groups.

Area of Study 1: What influences a person's perception of the world?

Area of Study 2: How are people influenced to behave in particular ways?

Area of Study 3: Student-directed practical investigation

## ***Unit 3: How does experience affect behaviour and mental processes?***

The unit focuses on how the nervous system influences behaviour and the way people experience the world. Students explore how stress may affect a person's psychological functioning and consider the causes and management of stress. Students investigate how mechanisms of memory and learning lead to the acquisition of knowledge, the development of new capacities and changed behaviours. They consider the limitations and fallibility of memory and how memory can be improved. Contributions from classical and contemporary research are utilised to aid students' understanding.

Area of Study 1: How does the nervous system enable psychological functioning?

Area of Study 2: How do people learn and remember?

## ***Unit 4: How is wellbeing developed and maintained?***

In this unit students examine the nature of consciousness and how changes in levels of consciousness can affect mental processes and behaviour. They consider the role of sleep and the impact that sleep disturbances may have on a person's functioning. Students explore the concept of a mental health continuum and apply a biopsychosocial approach, as a scientific model, to analyse mental health and disorder.

Area of Study 1: How do levels of consciousness affect mental processes and behaviour?

Area of Study 2: What influences mental wellbeing?

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*Studies in VCE Psychology can lead to study and career options in the following areas:*

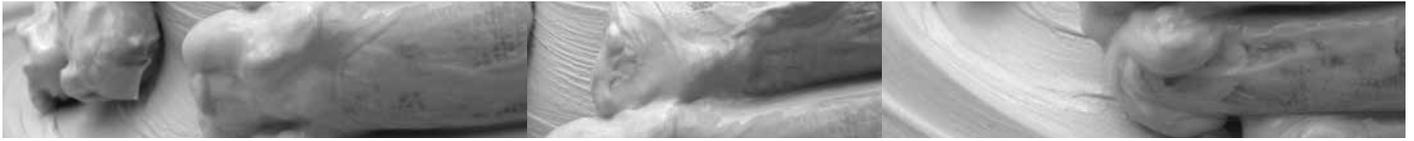
Career counsellor  
Counselling psychologist  
Educational psychologist  
Human resource manager  
Marriage counsellor  
Organisational psychologist  
Sleep specialist  
Teacher

Child psychologist  
Detective  
Family therapist  
Life coach  
Mental health nurse  
Police officer  
Social worker  
University lecturer

Clinical psychologist  
Early childhood educator  
Forensic psychologist  
Marketer  
Neuropsychologist  
School counsellor  
Sports psychologist  
Youth worker

# Studio Arts

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VCE Studio Arts encourages and supports students to recognise their individual potential as artists and develop their understanding and development of art making. The study broadens students' understanding of, and ability to engage with, artworks. It equips students with the knowledge and skills to pursue an art studio practice and follow tertiary and industry pathways in fine art, research and education. The study also offers students opportunities for personal development and encourages them to make an ongoing contribution to society and the culture of their community through lifelong participation in the making and viewing of artworks.

## ***Unit 1: Artistic inspiration and techniques***

This unit focuses on developing an individual understanding of the stages of studio practice and learning how to explore, develop, refine, resolve and present artworks. Students also research and analyse the ways in which artists from different times and cultures have developed their studio practice to interpret and express ideas, source inspiration and apply materials and techniques in artworks.

Area of Study 1: Researching and recording art ideas

Area of Study 2: Studio practice

Area of Study 3: Interpreting art ideas and use of materials and techniques

## ***Unit 2: Design exploration and concepts***

This unit focuses on students establishing and using a studio practice to produce artworks. This includes the formulation and use of an individual approach to documenting sources of inspiration, experimentation with materials and techniques, development of ideas and subject matter, the creation of aesthetic qualities and the use of a visual diary as part of the studio process. Through the study of art movements and styles, students begin to understand the use of other artists' work in the making of new artworks.

Area of Study 1: Exploration of studio practice and development of artworks

Area of Study 2: Ideas and styles in artworks

## ***Unit 3: Studio production and professional art practices***

This unit focuses on students developing and using an exploration proposal to define an area of creative exploration. The development of the potential directions is an intrinsic part of the studio process to support the making of finished artworks in Unit 4. The study of artists and their work practices and processes may provide inspiration for students' own approaches to art making through investigation and analysis. They explore professional art practices of artists from different historical and cultural contexts in relation to particular artworks and art forms.

Area of Study 1: Exploration proposal

Area of Study 2: Studio process

Area of Study 3: Artists and studio practices

## ***Unit 4: Studio production and art industry contexts***

This unit focuses on the planning, production and evaluation required to develop, refine and present artworks that link cohesively according to the ideas resolved in Unit 3, which also reflect refinement and skilful application of materials and techniques, and the resolution of ideas and aesthetic qualities. This unit also investigates aspects of artists' involvement in the art industry, focusing on a least two different exhibitions. Students investigate the methods and considerations of the artist and/or curator involved in the preparation, presentation and conservation of artworks displayed in exhibitions in at least two different galleries or exhibitions.

Area of Study 1: Production and presentation of artworks

Area of Study 2: Evaluation

Area of Study 3: Art industry contexts

## ***Additional information***

Students undertaking VCE Studio Arts are encouraged to spend time outside school hours - such as school holidays - visiting exhibitions at commercial and public art galleries.

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*Studies in VCE Studio Arts can lead to study and career options in the following areas:*

Animator

Art historian

Artist

Ceramic artist

Fashion designer

Illustrator

Patternmaker

Tattooist

Art gallery assistant

Art teacher

Arts administrator

Conservator

Film maker

Interior designer

Photographer

Teacher

Art gallery director

Art therapist

Cartoonist

Craftsperson

Graphic designer

Jewellery designer

Sculptor

Visual merchandiser

# Visual Communication Design

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**Visual Communication Design** is a VCE study designed to develop an understanding of the way visual language can be used to convey ideas, information and messages in the fields of communication, environmental and industrial design. The course enables students to build skills in a range of practical and theoretical areas. Content includes a focus on drawing to conceptualise, visualise and present ideas. Students analyse existing designs to inform their own work.

## ***Unit 1: Introduction to Visual Communication Design***

This unit focuses on using visual language to communicate messages, ideas and concepts. Students practise their ability to draw what they observe and they use visualisation drawing methods to explore their own ideas and concepts. Students review the contextual background of visual communication through an investigation of design styles. This research introduces students to the broader context of the place and purpose of design.

Area of Study 1: Drawing as a means of communication

Area of Study 2: Design elements and design principles

Area of Study 3: Visual communication design in context

## ***Unit 2: Applications of visual communication within design fields***

This unit focuses on the application of visual communication design knowledge, design thinking skills and drawing methods to create visual communications to meet special purposes in designated design fields.

Area of Study 1: Technical drawing in context

Area of Study 2: Type and imagery in context

Area of Study 3: Applying the design process

## ***Unit 3: Visual communication design practices***

In this unit students gain an understanding of the process designers employ to structure their thinking and communicate ideas with clients, target audiences, other designers and specialists. A design brief is established and ideas researched and generated for a client.

Area of Study 1: Analysis and practice in context

Area of Study 2: Design industry practice

Area of Study 3: Developing a brief and generating ideas

## ***Unit 4: Visual communication design development, evaluation and presentation***

The focus of this unit is on the development of design concepts and two final presentations of visual communications to meet the requirements of the brief established in Unit 3. There is a practical/written exam in the November exam period.

Area of Study 1: Development, refinement and evaluation

Area of Study 2: Final presentations

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*Studies in VCE Visual Communication Design can lead to study and career options in the following areas:*

Advertiser

Cartoonist

Film maker

Graphic designer

Interior designer

Publisher

Signwriter

Web designer/developer

Animator

Engineer

Fine artist

Illustrator

Landscape architect

Product designer

Textile designer

Visual merchandiser

Architect

Fashion designer

Furniture designer

Industrial designer

Multimedia developer

Set and theatre designer

Type designer

Visual artist

# VCE Course Selection – Program Comparison

<b>VCE</b> <b>(Victorian Certificate of Education)</b>	<b>VETIS</b> <b>(Vocational Education and Training in Schools)</b>	<b>SBAT</b> <b>(School-Based Apprenticeships and Traineeships)</b>	<b>Bespoke Programs</b>					
<p>Usually completed over 2 years                      Year 11 – 6 subjects                      Year 12 – 15 subjects                      Year 13 – exceptional circumstances</p> <table border="1"> <tr> <td>16 units</td> <td rowspan="2">Achieve Certificate</td> </tr> <tr> <td>At least 3 English units (incl. a U3/4 sequence)</td> </tr> <tr> <td colspan="2">3 other 3/4 sequences</td> </tr> </table> <p>ATAR                      Australian Tertiary Achievement Rank                      Calculated on Study Scores of Units 3/4 studies (scored subjects). English/Literature plus next best three studies.</p> <p>Maximum score is 99.95, percentile ranking Used as <b>one</b> selection measure for entry into uni <b>DIRECTLY</b> from Year 12.</p> <p>26% courses use ATAR alone. May also ask for folio, interview, etc.</p> <p><b>Scoreless VCE</b></p> <ul style="list-style-type: none"> <li>• Same unit requirement</li> <li>• Outcomes <b>MUST</b> be achieved</li> <li>• No formal assessments (eg SATs, SACs, exams) under test conditions</li> <li>• Greater flexibility to 'modify' curriculum to suit individual student's learning needs</li> <li>• Form required – numerous signatures needed to get approval</li> <li>• Can be decided at any time of the year</li> </ul>	16 units	Achieve Certificate	At least 3 English units (incl. a U3/4 sequence)	3 other 3/4 sequences		<ul style="list-style-type: none"> <li>• Vocational training recognized in the VCE</li> <li>• Student can complete Cert II, III, IV (partial) in some qualifications (see handbooks)</li> <li>• Can be 1 or 2 year programs</li> <li>• Nationally recognized qualification</li> <li>• Replaces: 1 elective @ Y10                      1 subject @ Y11&amp;12</li> <li>• Students given private study – catch up on clashes or VETiS work</li> <li>• Contributes to VCE Units + ATAR (check VCAA website)</li> <li>• Most courses are delivered on Wednesdays or Fridays (see VETiS Handbooks)</li> </ul> <p>Considerations:</p> <ul style="list-style-type: none"> <li>• \$1200 - \$2500 on top of Woodleigh School fees (\$700 subsidy given by school)</li> <li>• Clashes with Woodleigh timetable</li> <li>• Structured Workplace Learning (SWL) – min. of 5 days per year during school holidays <b>COMPULSORY</b></li> <li>• Can provide a guaranteed pathway into further related qualifications</li> <li>• Training is delivered at a Registered Training Organisation (RTO) – this could be another school (Toorak, Mount Eliza SC, etc) or a TAFE (Chisholm, Holmesglen)</li> <li>• Student must be able to manage own time and be organized</li> <li>• Enrolment driven by academic school calendars</li> <li>• Application process – places are competitive</li> <li>• Student is not "bound" to complete full qualification – but withdrawal after cut-off may incur full fees and influence contribution to ATAR and VCE</li> <li>• Certificate of attainment awarded</li> </ul>	<p>Must be 15 years old                      Can be commenced at any time during the year                      13-15 hours of work + training per week                      3 modes of delivery:</p> <ol style="list-style-type: none"> <li>1. 3 days @ school                      1 day @ work                      1 day @ TAFE</li> <li>2. 3 days @ school                      2 days @ work                      Block weeks of training (generally in holidays)</li> <li>3. 3 days @ school                      2 days @ work + on-the-job training</li> </ol> <ul style="list-style-type: none"> <li>• Contract signed, lodged with Skills Victoria</li> <li>• Training contributes to VCE units</li> <li>• Student paid the award wage for hours worked</li> <li>• Training paid by either student or employer (case-by-case basis)</li> <li>• 2 year SBAT equivalent to 1 year completion</li> <li>• Work on 1/2 principle (e.g. 2 years SBAT is the equivalent of 1 year completion of a non-school based apprenticeship)</li> <li>• Employee expectations – incentives given, superannuation</li> <li>• Encouraged to complete alongside a 'scoreless' VCE; however, scored is possible</li> <li>• 10% discount to Woodleigh School fees offered to SBAT students</li> </ul>	<p>Approved only on a case-by-case basis</p> <p>Other key people in the school are involved in the decision-making process:</p> <ul style="list-style-type: none"> <li>• Head of Campus</li> <li>• Head of Studies</li> <li>• Psychologist</li> <li>• Pathways</li> </ul> <p>Reduced program allocated and additional support offered:</p> <ul style="list-style-type: none"> <li>• Support for learning in Pathways</li> <li>• Online programs to supplement learning (eg. Future Learn)</li> <li>• Additional Work Experience</li> <li>• Stepping stone to other programs known as Extension Studies</li> <li>• Distance Education</li> </ul>
16 units	Achieve Certificate							
At least 3 English units (incl. a U3/4 sequence)								
3 other 3/4 sequences								

# VCE Course Selection

## Proposed Subject Selection – Planning Sheet

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Note: This is **NOT** the official Subject Selection Sheet. Your official Subject Selections will be made online. In order to ensure parents are involved in, and approve of, the selections made, all students are required to **print a hard copy** of their online selections and return this **with the relevant signatures** prior to the final due date of Tuesday 31 July 2018.

### *Year 11*

List the studies you intend to complete during your first VCE year.

*(6 studies including English is the most common course selection)*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_

*Other subjects (including VETiS, Dance or other outside providers):*

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The VCE subjects I completed in Year 10

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### *Year 12*

List the studies you intend to complete during your second VCE year.

*(5 studies including English and/or Literature is the most common course selection)*

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

*Other subjects (including VETiS, Dance, other outside providers or Higher Education Studies):*

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